A UNITED STATES DEPARTMENT OF COMMERCE PUBLICATION

Incorporating *International Commerce*

NOVEMBER 30, 1970

Commerce Today

Coming Developments in Business and Technology

McLellan Of Commerce And NASA's Armstrong Look Over Model Of Aerospace Show Building

FROM THE SECRETARY

Cost Of Controlling Pollution Must Be Met As Essential Investment In The Nation's Future

In his State of the Union message last January, President Nixon made a historic commitment that this nation will do everything possible and necessary to preserve the atmosphere in which we live.

This commitment reflected America's awakening to the urgent needs of the environment, before abuses threaten mankind.

Since the President pledged the nation to attack pollution, much has been achieved:

- Creation of the Environmental Protection Agency has given new force and direction to the Federal Government's efforts to curb abuses.
- Through the National Pollution Control Council, created by President Nixon, industry leaders are working with the Department of Commerce to find ways and means of solving industrial pollution.
- The Maritime Administration of the Commerce Department is working to develop new means of preventing tanker accidents at sea, and of minimizing oil spillage when it does occur.

All of this effort and much more, by government and private industry, is leading to significant progress against various forms of pollution — industrial wastes, personal wastes, and gasoline emissions, to name just a few.

Not all of industry is fully committed to reducing pollution. Some, for example, pollute only under cover of darkness. This is the height of corporate irresponsibility, and will invite community condemnation as well as public regulation.

But progress is being made by many industries to restore a clean environment.

Several additional facts and guidelines should be recognized and established for future efforts.

First, the costs of fighting pollution are enormous, with hundreds of millions of dollars already invested. Capital is having to be diverted to these efforts, some flexibility in pricing is being lost, and competitive disadvantages are growing with other countries which do not share a comparable commitment to a clean environment.

Obviously, the consumer is the one who pays the costs of business measures to clean up the environment.

Nevertheless, the rising costs of controlling pollution must be met—not just as worthy investments in the future, but as essential investments in survival.

Second, determinations will have to be made on possible use of taxes and other public tools which may be employed to provide incentives to achieve pollution control as early as possible.

Third, local government often ranks foremost as a polluter because of sewage and power facilities, buses, and other municipal services. The public sector must meet its responsibilities for pollution control.

Fourth, mandatory actions by government are not necessarily going to provide instant solutions to the problems of the environment. Industry must have sufficient time to carry out programs which are technically feasible and economically tolerable.

Finally, the nation must insist that the word pollution not be written in terms of political expediency, which could lead to extreme actions. It is clearly the temper of our times that any industry which does not contribute to the resolution of environmental problems will be inviting both public wrath and public regulation. But there is far less service in pointing the finger of blame than there is in pointing the way to solutions.

It is vital that both government and American industry now wisely demonstrate their capabilities to achieve these solutions.

Maurice H. Stans

Commerce Today

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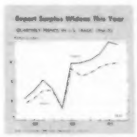
Vol. I, No. 4, November 30, 1970



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COVER—*Moon pioneer Neil A. Armstrong (left), now Deputy Associate Administrator for Aeronautics with the National Aeronautics and Space Administration, and Commerce's Assistant Secretary for Domestic and International Business, Robert McLellan, inspect a mockup of the U.S. Pavilion for the 1971 Paris Air Show. See story, Page 19.*

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ECONOMIC
HIGHLIGHTS

Economy Has Room To Grow Without Inflation; Corporate Profits Rise As Productivity Increases

Economic Highlights is prepared by Dr. Harold C. Passer, Assistant Secretary for Economic Affairs, and is based on the latest economic indicators (see charts on adjoining page).

The U.S. economy was operating above its potential from late 1965 to mid-1969, and it is no coincidence that inflation accelerated during those years. Now that our productive capacity is no longer strained, the economy can resume normal growth along with further reduction in inflationary pressures.

Potential gross national product, estimated on the basis of the growing labor force and production facilities, is increasing by more than 4 percent per year. In contrast, actual gross national product, with the price factor removed, is slightly below a year ago. Thus, a gap has opened between actual and potential GNP.

Although actual GNP in constant dollars increased at an annual rate of 1.4 percent in the third quarter, it was about 4½ percent below the potential output of the economy. As a result of the automobile strike this gap undoubtedly has widened further during the current quarter.

The existence of a GNP gap means that we have room to grow without straining our resources. As the economy returns to full employment, the gap will close. Because a rapid closing of the gap would make it difficult to reduce inflationary pressures further, it is important to approach full employment at a smooth and steady pace.

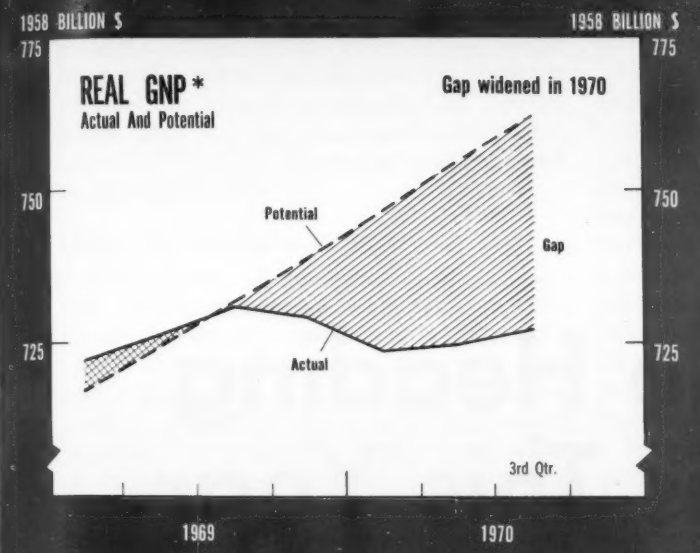
For businessmen, the most encouraging news in recent months was the moderate third quarter gain in corporate profits. Earnings, however, still are below a year ago. The primary reason for the third-quarter gain was the upsurge in productivity in the past six months following little change during the previous 18 months.

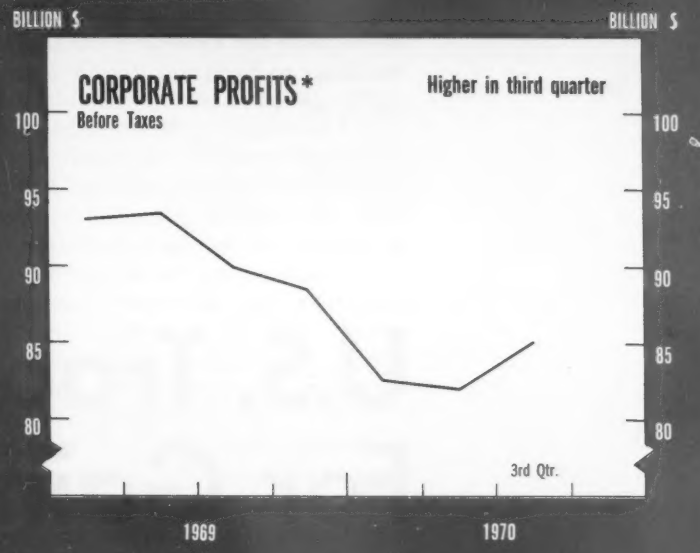
Housing, bolstered by increased flows of funds into the mortgage market, continued in October the strong recovery that began last February. Industrial production, however, sagged again, mainly as a result of the spreading effects of the auto walkout.

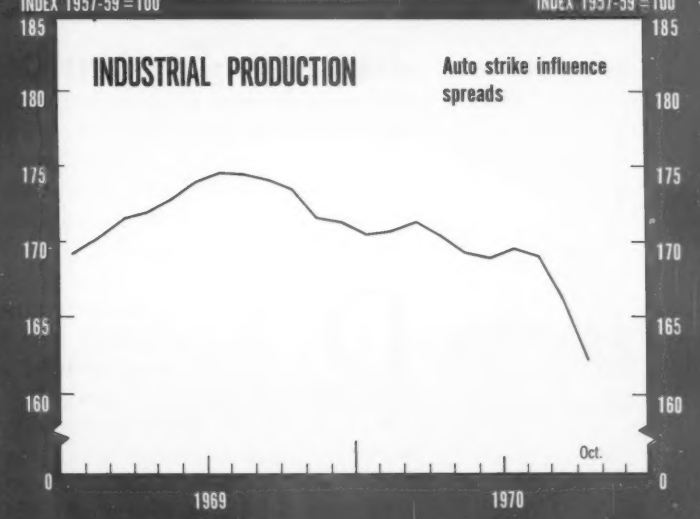
Contracts and orders for plant and equipment continue to trace an erratic and sluggish pattern. Thus, it appears that business capital spending in the months ahead will remain close to current levels.

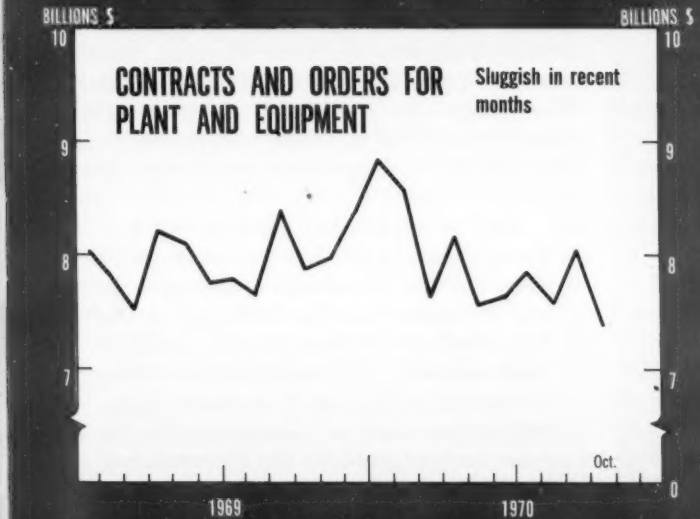
The liquidity deficit in our international balance of payments totaled $3.3 billion in the first nine months of 1970, compared to $7.4 billion in the same period last year. If adjustments are made for special financial transactions, however, the deficit thus far in 1970 is about $4 billion, an improvement of half a billion over the 1969 period.

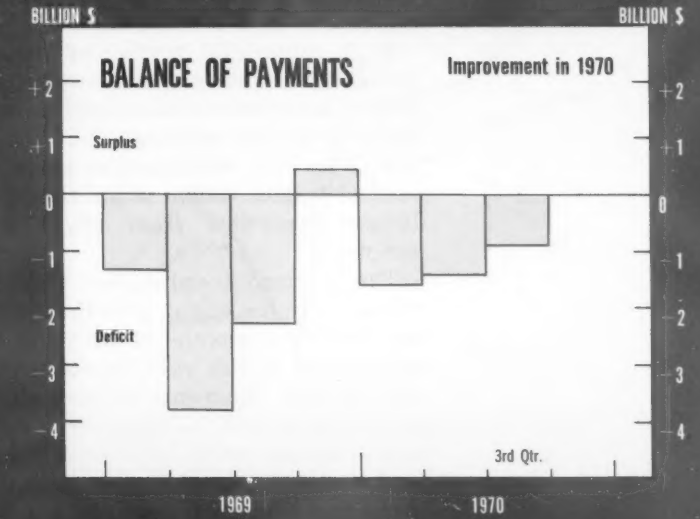
Latest Indicators











All data seasonally adjusted.
*Annual rates.

Commerce Today
November 30, 1970
Vol. I, No. 4

U.S. Trade Heading For Gains This Year

January-September Export Surplus Improves

Developments in the first nine months of this year indicate that 1970 will be a year of substantial advances in U.S. foreign trade.

► Exports, excluding military grant-aid, were running at a seasonally adjusted annual rate of $42.7 billion in January-September, 14½ percent above the actual 1969 total. The value of imports rose 9½ percent to a yearly rate of $39.4 billion.

► A substantial portion of the rise resulted from higher prices, however, as inflationary pressures continued in this and other major industrial countries.

► The U.S. merchandise trade surplus climbed to $3.3 billion at an annual rate in January-September from only $1.3 billion last year.

The quarterly trend showed a gradual acceleration in the export growth rate between the final three months of 1969 and the second quarter of this year. In the third quarter, however, shipments dropped slightly as aircraft deliveries declined from extremely high levels reached in April-June. The strongest import increase of the year was recorded in the first quarter, followed by a more moderate growth in April-June and a negligible advance in the third quarter.

U.S. exports benefited this year from the continued high levels of economic activity abroad, particularly in Western Europe and Japan. Pressures on productive capacity and shortages in certain product lines in important markets stimulated demand for a wide range of U.S. products. Foreign demand for farm products has also been strong.

Import activity was more vigorous than in previous periods of economic sluggishness. One reason was the shift toward a higher consumer and capital goods content and away from industrial supplies in our foreign pur-

The accompanying analysis of U.S. foreign trade in the first 9 months of this year, and the presentation on pages 37 and 38 of the most current data on the U.S. share of world exports of manufactures, continue for readers of* Commerce Today *two series which appeared quarterly in International Commerce. The reports are prepared by the International Trade Analysis Division of the Bureau of International Commerce.

chases, which tended to moderate the impact on imports of cyclical fluctuations in the U.S. economy. Other factors which strengthened import demand during the present slowdown include the greater availability of foreign goods here and the increased promotional efforts on the part of both the importers and foreign producers.

Gains in nonfarm exports

U.S. exports of nonagricultural products rose to a seasonally adjusted total of $26.7 billion in the first nine months. The $3.7 billion or 16 percent increase in these shipments from the same 1969 period represented roughly four-fifths of the total U.S. export expansion. The falloff in nonfarm shipments in July-September, following strong gains in the first and second quarters, was due to a decline in aircraft deliveries. Contributing most to the advance so far this year have been exports of machinery, chemicals, civilian aircraft, steel, and coal.

The high rate of economic activity and the consequent pressures on domestic productive capacity in several of our major industrial markets stimulated demand for U.S. machinery of most types. Exports of machinery reached $8.4 billion, an advance of 17 percent from January-September 1969. The quarterly trend has been upward, with particularly strong gains in July-September.

Leading the rise in machinery exports have been shipments of computers and other types of office machines. The industrial countries of Western Europe plus Japan were again the largest purchasers.

Deliveries of metalworking machines increased substantially. Greater shipments of metalcutting machine tools to Canada for use in some of the automobile plants of U.S. producers there accounted for much of this advance. The growth in exports of metalworking machinery parts and accessories to the European Economic Community and Japan was also strong. Shipments of mining and well drilling machinery increased by 32 percent, reflecting vigorous mining activity and greater oil exploration in a number of countries. Exports of materials-handling equipment also gained strongly. Especially significant gains were noted in shipments to Belgium and the Republic of South Africa.

The only decline among major nonelectrical machinery exports occurred in agricultural machinery and tractors. This falloff reflected the cutback in farm machinery investment in Canada where wheat acreage was reduced drastically this year in an effort to deplete existing wheat stocks.

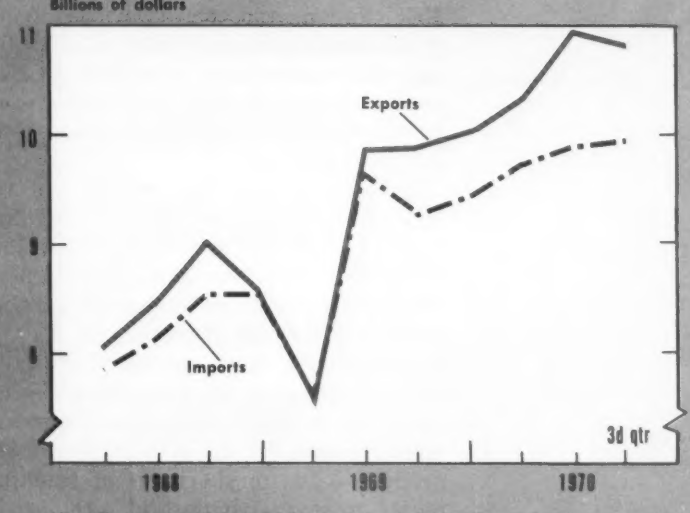
Following a dip in late 1969, exports of electrical machinery showed a steadily rising trend this year. From the same period a year ago, the increase in January-September amounted to 12 percent. Greater deliveries of semiconductors to Japan, Mexico, and West Germany contributed almost one-fourth of this rise. Shipments of power machinery, switchgear, and measuring and controlling instruments also advanced strongly. In contrast, exports of telecommunication apparatus, mainly radio and television broadcasting equipment, were sluggish.

Deliveries of 15 of the newly introduced jumbo jets to airlines in Western Europe and Japan contributed about $300 million to the U.S. export expansion. Since aircraft are generally sold with substantial amounts of spare equipment, exports of parts and accessories also showed a marked rise. Although sales of the "older" types of jetliners continued, there was a slight cutback from last year's high levels. Deliveries of military aircraft declined sharply.

Shipments of automotive products to Canada dipped slightly below January-September 1969 levels. Much of this decline was

Export Surplus Widens This Year

QUARTERLY TRENDS IN U.S. TRADE, 1968-70



Note: First-quarter 1969 trade depressed by dockstrike.

U.S. Exports Respond To Boom In Steel Demand Abroad

	January-September 1970	
	Value	Change from Jan.-Sept. '69
	Millions of dollars	
Iron and steel products	967	+353
Plates and sheets	280	+ 99
Primary forms	274	+149
Tubes, pipes, fittings	172	+ 22
Castings and forgings	63	+ 13
Bars, rods, hollow drill steel	48	+ 9
Iron and steel scrap	346	+134
Coal	735	+286

attributed to the drop in U.S. demand for automobiles. Faced with weak markets at home, U.S. manufacturers cut back deliveries to their Canadian plants of automotive parts for assembly into cars sold mainly in this country.

Shipments of automobiles to countries other than Canada dropped sharply. A major factor in this development was the reduction in car deliveries to Mexico where efforts have been made to increase the domestic content of manufactured products by requiring greater importation of parts. U.S. exports of automotive parts to that country showed a substantial increase as a result.

Although chemical exports declined in both the second and third quarters, their January-September total exceeded last year's comparable level by 18 percent. Over half of the $167 million increase in organic chemical shipments reflected greater loadings for the EEC, Japan, and the American Republics. Also advancing were deliveries of medicinals and pharmaceuticals—especially to Belgium—and plastics. Exports of manufactured fertilizers declined in response to increased production overseas.

Foreign demand for metals and related products continued strong, reflecting the high level of industrial activity in Japan and the EEC. Exports of iron and steel-mill products advanced by $353 million, with particularly large increases in shipments to the United Kingdom and West Germany. Toward the end of the period, however, deliveries turned down as markets weakened. Demand was most vigorous for the primary forms of steel products—due to shortages of smelting capacity in several important steel producing countries—and for plates and sheets.

The large, $81 million, gain in aluminum deliveries reflected the high rate of shipments in the first half of the year. The third quarter decline in these exports was probably related to the greater supply forthcoming from newly completed production facilities abroad.

The high level of steel production in Japan stimulated another large expansion in U.S. exports of coking coal. That country accounted for more than two-fifths of the $286 million gain. The EEC countries and Canada also took significantly greater quantities of coal. The sizable increase in deliveries of iron and steel scrap also reflected the vigorous pace of foreign steel activity. Exports advanced by 63 percent, again with Japan as the leading market.

Sales of pulp and waste paper expanded by two-thirds. Buoyant markets in Western Europe—especially the United Kingdom, Italy, and West Germany—contributed most to this expansion. Rising demand and higher prices expanded the value of log shipments to Japan.

Farm exports rise

U.S. exports of agricultural commodities increased sharply in both the second and third quarters. For the entire nine month period, these shipments amounted to $5.3 billion, seasonally adjusted, $1 billion or one-fourth higher than in January-September 1969. Much of this large expansion was associated with the strong growth in foreign demand for animal feed as livestock numbers continued to rise. Reduced supplies abroad of competing feedstuffs also played a role in the export advance.

Shipments of soybeans provided a substantial part of the increase in U.S. farm exports. The $364 million or 82 percent gain, mainly in exports to Western Europe and Japan, was unusually vigorous. A sizable advance occurred also in shipments of soybean oil-cake and meal. Corn, our second largest animal feed export after soybeans, rose strongly from 1969 levels as did loadings of grain sorghum. In addition to Western Europe and Japan, Mexico was also a heavy outlet for our corn.

Greater shipments under PL-480 programs contributed importantly to the $170 million gain in wheat exports. Pakistan, Turkey, and India received significantly greater deliveries. Among our commercial markets, Japan was again the leading buyer.

The 1969 recovery in the long sluggish shipments of fats and oils continued this year. The $154 million increase, $79 million of which represented higher soybean oil exports, was mainly in response to a worldwide shortage of competing oils.

In contrast to these gains, exports of rice and unmanufactured tobacco fell to lower levels. In the case of rice, greater foreign production was the major factor. Higher U.S. prices and increased supplies abroad combined to depress shipments of tobacco.

Rise in consumer imports

Reflecting weakness in various consumer sectors, imports of consumer goods advanced considerably more slowly than last year when the gain was over one-fifth. At a seasonally adjusted total of $9.5 billion in the first 9 months, these arrivals exceeded the comparable 1969 level by 14 percent, and accounted for two-fifths of the overall import increase. So far this year, consumer goods imports have comprised 4.9 percent of personal consumption expenditures on goods compared to the 4.4 percent ratio last year.

Heavy demand for foreign-type autos by U.S. buyers spurred a sharp acceleration in imports of these vehicles from overseas sources. Purchases from West Germany and Japan, which together comprise about three-fourths of our foreign car imports, accounted for practically all of the rise. Japan's share of the import total increased again this year, to 23 percent, while the proportion coming from Germany held even with last year after three successive annual declines. In addition to the large advance in foreign car imports, receipts of automotive engines and parts from overseas climbed strongly. Some of this rise was probably associated with the importation of components for a new U.S. subcompact car designed to compete in size and price with foreign makes.

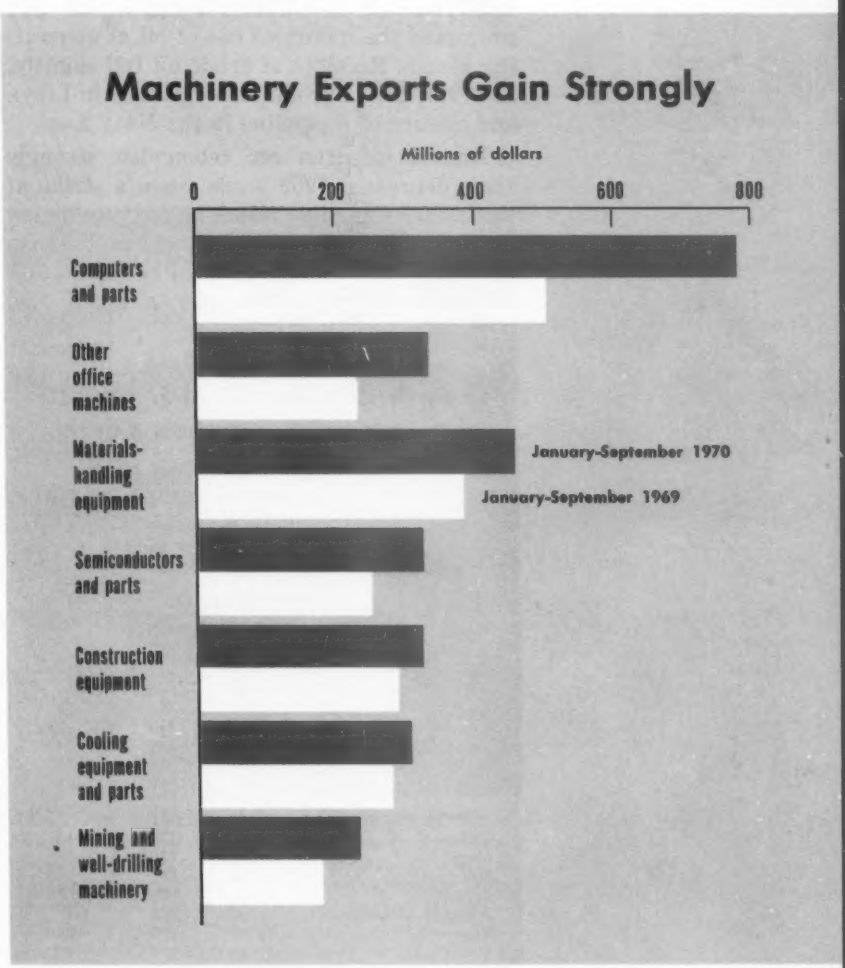
Foreign-type autos constituted 14 percent of total U.S. car sales in the first nine months, up sharply from 10.9 percent last year.

Arrivals of autos and parts from Canada advanced but, because of sluggish demand here for U.S.-make cars, the rate of increase was much smaller than in previous years. On a quarterly basis, the import trend was uneven, with the heaviest volume concentrated in April-June.

Purchases of footwear posted another strong increase. As U.S. production declined again, foreign footwear continued to increase their share of the market. Arrivals of clothing also rose substantially. Imports of transistor radios climbed only marginally over the same period last year as arrivals fell abruptly in the third quarter following rapid advances in the first half. Purchases of television receivers picked up momentum in recent months and exceeded comparable 1969 levels by 8 percent.

Despite slackening in investment outlays, capital goods imports climbed substantially in each quarter. The nine-month total of $3.3 billion, seasonally adjusted, exceeded the comparable 1969 level by 15 percent. Due to a leveling in truck purchases, however, the rate of increase was considerably smaller than last year's advance. Imports of capital goods, excluding Canadian-built trucks, accounted for 5.6 percent of U.S. expenditures on producers' durable equipment compared to a ratio of 5 percent in 1969.

Almost all of the expansion in capital



goods imports consisted of machinery. Arrivals of office machines posted a strong increase, primarily in greater purchases of electronic calculators from Japan and data processing machines from Canada. Entries of textile machines also climbed substantially, led by imports from West Germany. Receipts of transistors and other semiconductors from Mexico, Singapore, Hong Kong, and Korea continued to advance.

Entries of trucks from Canada picked up momentum after a slow start in the early months of this year. The January-September total was about even with last year's comparable period.

Imports of industrial supplies climbed 6 percent above January-September 1969 levels. Except for a dip in April-June this year, the rise has been steady since mid-1969 despite a nearly continuous downtrend in U.S. industrial production during this period.

Purchases of residual fuel oil rose particularly rapidly, reflecting greater demand by electric utilities. Short supplies of coal prompted the increased use of oil at generating plants. Receipts of crude oil fell slightly, however, due to production cutbacks in Libya and closure of a pipeline in the Near East.

Imports of iron ore rebounded strongly from depressed 1969 levels when a strike at two major Canadian mines halted production at the height of the shipping season. Imports of industrial and agricultural chemicals accelerated sharply after only a small rise last year. Greater purchases of fertilizers from Canada—mainly potassium chloride at sharply higher prices—were a major factor in the increase. Larger deliveries here of inorganic chemicals and plastic materials added to the rise in chemical imports. Arrivals of textiles continued to advance. Most of the increase represented greater imports of manmade fiber yarns and fabrics.

For the second consecutive year, steel imports dropped markedly in quantity, reflecting sluggish U.S. demand, voluntary restrictions on shipments to this country by major suppliers in the EEC and Japan, and heavy pressures on capacity overseas which limited exportable supplies, particularly in Western Europe. However, mainly because of higher prices, the value of foreign steel purchases rose 4 percent over the January-September 1969 total. The shift in the composition of our steel imports toward the more expensive types—tool, alloy, and stainless grades—was relatively small. From 3.8 percent of the total in 1969, the share of these types rose (in terms of quantity) to 4.4 percent in January-September.

Growth Resumes In U.S. Imports Of Industrial Supplies, Foods

	Percent change 1968 to 1969	January-September 1970 Value	Percent change from Jan.-Sept. '69
		$ million	
Industrial supplies	—	11,148	+ 6
Steel	−12	1,334	+ 4
Crude petroleum	+ 9	948	− 2
Fuel oil	+ 6	815	+21
Textile yarns and fabrics	+ 5	740	+ 9
Chemicals	+ 3	632	+19
Copper	−43	401	+11
Lumber	+12	392	−24
Iron ore	−11	364	+41
Woodpulp	+16	363	+ 1
Nickel	+ 4	229	+27
Aluminum	−25	189	−11
Foods and beverages	− 1	4,533	+21
Coffee	−22	877	+45
Meat	+16	770	+18
Fish	+10	577	+14
Sugar	—	555	+18
Alcoholic beverages	+ 4	477	+11
Vegetables	+ 8	230	+24

Expansion in food imports

After a small decline in 1969, purchases of foods and beverages posted an unusually strong rise of one-fifth over the same period a year ago. Most of the increase occurred in the first quarter when sharp price increases for a number of commodities boosted the import value. The second quarter rise was much less substantial and in July-September purchases dropped sharply. In January-September 1970, imported foods accounted for 4.7 percent of consumer expenditures on foods and beverages, compared to 4.4 percent in 1969.

About one-third of the increase in the value of food imports was attributed to the surge in coffee arrivals. The increase in purchases of coffee, however, was mostly due to much higher prices since the quantity imported rose only 7 percent.

Imports of meat, largely fresh or frozen beef, also rose strongly and again higher prices were a major factor. In addition to increased arrivals from the two major suppliers, Australia and New Zealand, beef imports from Canada and Mexico climbed sharply. Following a slight dip last year, sugar purchases advanced by a fifth. Greater entries of fish, vegetables, and cocoa added further to the boost in food imports.

Pollution Control Patents Get Priority

Accelerated Processing Follows Nixon's Urging To Clean Up Environment By Inventive Genius

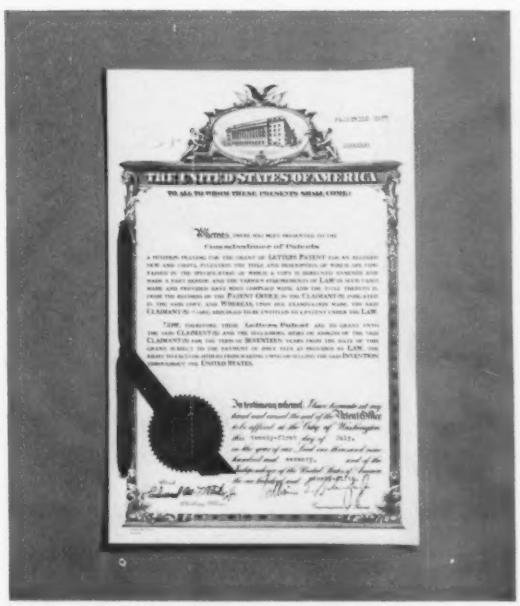
To speed the benefit to the public and focus the attention of both inventors and industry's scientists and engineers upon a major national problem, the Patent Office, at the direction of President Nixon, is giving priority processing to patent applications claimed by inventors to improve the air, water and soil.

Since February 17 when the acceleration began, more than 200 anti-pollution patent applications have been approved. Of these, the majority have already been acted upon by an examiner. Although the number of patents that will be issued on these applications is unknown, normal Patent Office experience is 70 percent.

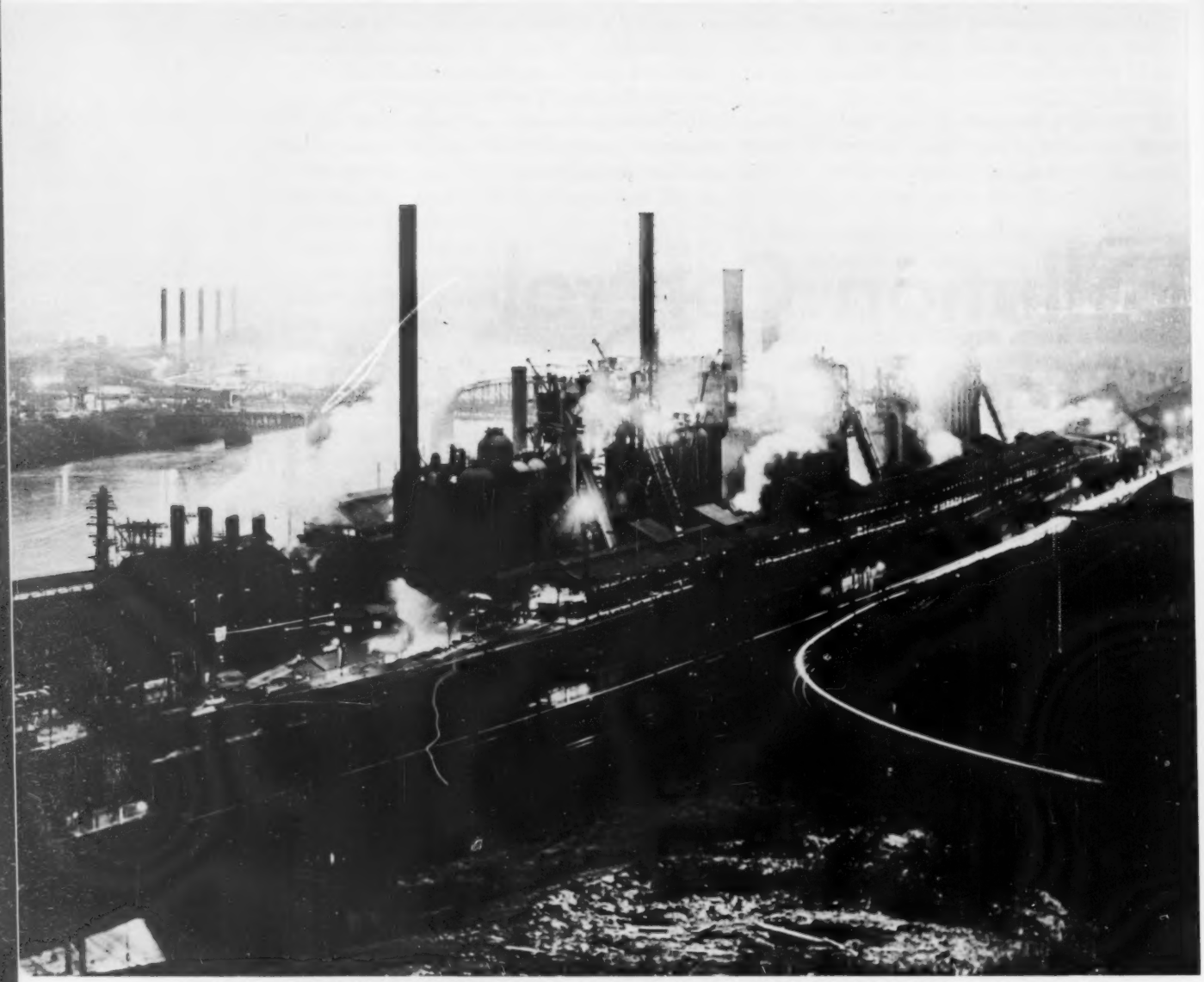
Moving these applications to the top of the Patent Office's heap of more than 200,000 pending applications will reduce the time for examining and processing them from 30 months to six or eight months.

"Faster processing will have at least two important results," according to U.S. Commissioner of Patents William E. Schuyler, Jr.

"First, we will get these inventions into use by industry at an earlier date," he said.



LETTERS PATENT—*With this document, an inventor is granted a patent, officially called a "letters patent," on his invention which guarantees him "the right to exclude others from making, using or selling the said invention throughout the United States" for 17 years. Signed by Patents Commissioner William E. Schuyler, Jr., the document certifies that the patent is granted for "an alleged new and useful invention."*



INDUSTRIAL ENIGMA—*The same growing industrial capacity which has contributed to the nation's greatness has at the same time created an air pollution problem such as this busy plant which spews out noxious fumes and gases making living in today's industrial community a problem in some areas.*

"And second, but of almost equal importance, we will make the new knowledge available to other inventors much sooner than we would if the applications took their turn in the regular examination and processing system. Information in a pending patent application is not disclosed, in order to protect the inventor's interests, but once a patent is issued, the information is available to anyone. Of course, the manufacture and use of the device is the 'property' of the inventor, but each invention creates new technical knowledge which may be the basis for further advancement by others.

"The history of American technology as reflected in the 180 years of the U.S. patent system indicates that technical solutions to our environmental problems will not come by way of dramatic breakthroughs," he added, "but like other technologies will follow the step-by-step advancements which not only improve on previous inventions but create the necessary knowledge upon which more sophisticated and efficient solutions are based."

Commissioner Schuyler is convinced that the same genius that made America the

SAD FACES—*Disappointed boys heed the sign and probably their noses too as the old swimming hole is no longer fit for even a fish. Urban pollutants continually drain into once fresh running creeks and rivers making waters dangerous for would-be swimmers.*

world's foremost industrial nation will solve the problems created by technology.

President Nixon, expressing the same confidence when discussing the environment problem (see "From the Secretary", inside front cover) in his State of the Union message this year, said: "The answer is not to abandon growth, but to re-direct it . . . we should turn toward ending congestion and eliminating smog the same reservoir of inventive genius that created them in the first place."

While priority processing of applications is a new and unprecedented move to stimulate work toward solving pollution problems, it should not suggest that America's inventors have been sitting idly by, watching these problems develop without attempting to do something about them. In fact, an estimated 5 percent of the 70,000 patents granted annually during recent years have been on inventions in this field.

Some idea of the type and variety of work going on can be obtained from the following list of areas of technology covered by the present more than 200 applications. They include:

Chemical purification of gases produced in chemical processes or as a result of combus-

AFFLUENT REFUSE—*Throughout the nation junkyards of old cars cast off by an affluent society dot the highways and biways polluting the environment by creating an eyesore.*

tion to produce power; composition for eliminating toxicity in use for controlling seed borne diseases; purification of salt water and polluted water; new fluids for combustion engines to minimize released pollutants; elimination of phosphor and nitrogen pollution of lakes and rivers; oil collecting mechanism; sewage purification; municipal waste treatment; highway noise and fume receiver; a trash compactor; and a measuring apparatus for pollutants.

A smog dissipater

Some patents may appear a bit bizarre. But it must be remembered that patents are granted only on devices or processes which are new, useful, and which work. Take, for example, a patent for an invention designed to prevent the accumulation of smog, especially in those areas of the country where thermal atmospheric conditions such as a warm layer of air aloft prevent the dissipation of smog.

The inventor would build a conical mound of earth approaching in size the pyramids of Egypt. The top of the cone is sliced off. It would be covered with an insulating material, then covered with air ducts running from bottom to top and open at each end, with the air ducts in turn covered with a layer of heat-absorbent black material. In operation, the heat-absorbent outer layer would be heated during the day by the sun's rays which would heat the air ducts and the air within them. This would create a constant updraft of air entering from the bottom and passing out the top. The heated air would then continue to rise until it cooled to the temperature of the air surrounding it, at which time it would be well above the warm layer of temperature inversion.

A recent patent covers an invention for removing fly ash pollutants from the emissions of incinerators and other combustion processes. The invention involves the conditioning of the effluent gases through the use of cool, dry air so that conventional gas cleaning devices, such as wet and dry scrubbers and electric precipitators, operate with increased efficiency. Although the reason for the improved efficiency is not definitely known, it is theorized that the cool, dry air increases the opportunity for the fly ash to be precipitated out by either lowering the turbulence of the air or modifying the surface charges of the particles of fly ash.

A method for cleaning polluted streams and rivers is covered by a patent granted in

FIGURE 1

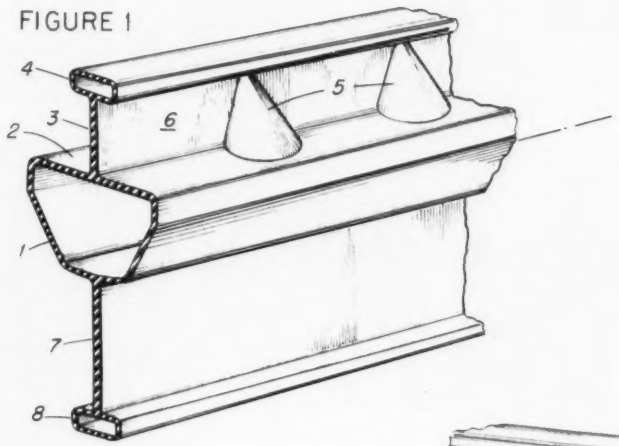
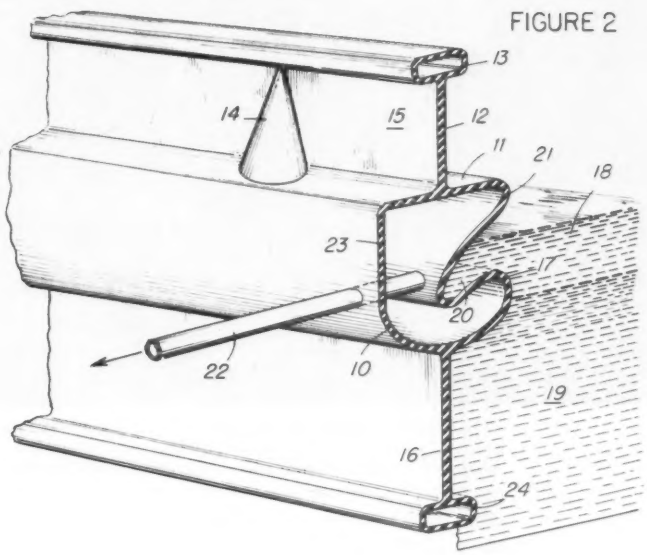


FIGURE 2



PATENT ART—*Accompanying each patent application are drawings such as this one representing an apparatus and process for confining floating liquid products. Granted last year, this is the type of patent which is presently being expedited as a result of the President's order on anti-pollution patents.*

1969. The cleaning is accomplished by settling the pollutants by (1) oxygenating the polluted water by blowing air through pipes extending across the stream bottom, and/or (2) adding coagulants from additional pipes also extending across the bottom. After such treatment, the pollutants tend to settle on the bottom of the stream as sludge, and pumps are placed in this settling zone for removal.

A device also patented in 1969 is a plastic barrier coated with asbestos which keeps oil from spreading from oil freighters and barges involved in accidents at sea. The barrier acts as a retaining device which allows the oil to be confined to a circular area which then can be burned or otherwise removed.

A patent in 1965 covers another invention for removing oil slicks. Tubes are placed around an oil slick for containing it, pumps then draw the contained oil and any water mixed with it through filters which separate the two so that the oil may be retained aboard a ship and clean water returned to the sea.

POLLUTED ISLE—*Until cities like New York can control their air pollution problems, residents face a gradually worsening situation which eventually could make living there intolerable, experts say. The nation's inventive genius is now called upon to pull us out of the pollution mire.*

A water skimmer

Another 1969 patent relates to water purification of large bodies of water such as ponds, streams, lakes and rivers. Water is taken from the stream or lake by a "water skimmer" and pumped into a wet well where large debris can be removed. From this point the water is pumped into filtering beds, the pollutants are removed as the water passes from the top to the bottom of the filter beds, and the clean water is returned to the stream by conduits on either side of the water skimmer. The filter beds may be cleaned by backflushing water through them and re-filtering this water in the settlement bed. In this manner, the filter beds can be continuously used and cleansed and it is only necessary to provide means for removing the filtering material from the cleanout beds.

The inventor states: "As surface bodies of water have become polluted from the waste of civilization and the development of industry, the search for an effective and economical means for purifying water has materialized to the point where it has become frantic. The present invention eliminates the defects of prior processes for purifying water and is effective, inexpensive to install, and economical to operate."

And to clean up the litter thrown onto highways, beaches and parks, there is an invention patented which functions like a giant vacuum cleaner. It sucks up the litter as it passes over large areas and blows it through a chute into a container mounted on the rear of the machine.

As the battle continues to purge the environment of pollutants, the Patent Office expects to be deluged with additional devices and systems which can be patented and thus help to assure man's survival on this planet.

—Patent Office

New Welcome Mat For Overseas Visitors

The U.S. Salesman—Behind The Counter

BEHIND THE COUNTER HELP—*This Washington, D.C. department store is able to assist foreign visitors in 32 different languages who will not only take home quality U.S. merchandise, but a memory of courteous and helpful service.*

Although one is inclined to associate the life of the export salesman with the exotic—travel throughout the world, coping with intrigue in the Middle East, drama in Africa, glamor on the Continent, mystery in the Orient—there is a breed of export salesmen who perform an important service while on their jobs at home in the U.S.A.

These salesmen are the retail clerks behind the counters of the nation's stores and shops.

"But they can still be export salesmen," according to C. P. Austin, Director of the United States Travel Service's Visitor Services Division. "Foreign visitors deal as much with U.S. retail sales personnel as with anyone else in this country. As a result, the retail sales person not only plays an important role in export expansion, but also helps shape the impressions of America the foreign visitor takes home to his native land."

Supporting Austin's view is the Director of USTS Research and Analysis Division William Dircks.

"U.S. products sold to foreign visitors could be considered in the same light as exports—even though the sale occurs in this country," he says. "Money foreign tourists spend in the United States on goods and service is a sig-

FASHION IN ANY LANGUAGE—*U.S. retail stores will send home warm memories with the visitor from overseas, when shopping assistance is given in the buyer's own language.*

VISITOR SERVICES DIRECTOR—*C. P. Austin Director of the United States Travel Service's Visitor Services Division, points out that U.S. retail sales personnel deal with foreign tourists as much as anyone else in the country. Because of this, public contact sales people play an important role in shaping the impression the overseas visitor takes home from the United States.*

nificant sector of our current account, building a favorable effect comparable to that achieved by exports."

USTS researchers estimate that the more than 12 million foreign visitors to the United States in 1969 spent more than $2 billion here for merchandise, meals, accommodations, transportation and other items. This figure represents a $406 million increase—a 24.6 percent jump—over the amount overseas tourists spent in this country in 1967. It also established tourism as the U.S. fifth largest source of foreign exchange earnings.

Based on figures for the first half of 1970, the U.S. will probably see 13.7 million foreign visitors this year. This is an increase of about 10 percent over 1969, and will probably, in turn, cause a corresponding increase in the number of foreign dollars spent here on U.S. goods.

C. Langhorne Washburn, Assistant Secretary for Tourism, thinks foreign visitors constitute a vast new "sleeping market" for U.S. merchandise.

"By 1974," Washburn points out, "inbound

VISIT USA traffic will reach 19 million and will probably represent close to $3.5 billion in purchasing power. U.S. receipts from foreign visitors already represent six percent of total exports. Some foreign tourists—especially Latin Americans—come to this country specifically to shop."

USTS' Austin has a word of advice for the manufacturer or retailer eyeing this VISIT USA market: "Selling it won't be easy."

Selling the foreign visitor is necessarily dealing with a different type of consumer—one who is not only from a different country, but one who is apt to speak a strange language, be used to a strange currency and have different tastes and values. The U.S. retail sales clerk needs to be aware of this consumer's special problems in his or her sales approach. The salesman's knowledge of one or two foreign languages could prove valuable. Failing this, he or she needs to learn what to do when encountering a non-English speaking foreign customer.

Foreign visitor sales treatment has been advanced by this country's non-profit Advertising Council, Inc. For the second year, the council has prepared a public service advertisement designed to assist public contact personnel who may have to deal with tourists from overseas. In addition, it has designed a series of advertisements reminding the average American that what "foreign visitors say about us when they go home . . . depends upon the people they meet."

Specifically tailored to run in company house organs and employee newsletters, the public contact personnel advertisement observes:

- **"To many foreign visitors who come to you for aid and answers, you not only have an American face, you are America's face. Your smile, your frown, your grin, your grimace may shape their whole image of all Americans."**

The public contact employee advertisement is part of an older "Invite and Welcome" campaign launched by the Advertising Council for USTS in May, 1968, to remind all Americans of their role as hosts to foreign visitors.

Another related advertisement focuses on "six tips on how to become an unforgettable American memory":

- **"You've been asked about bargains, and you don't know what to suggest? Phonograph records, costume jewelry, men's shirts, and ready-made clothes are all generally cheaper here than in most places abroad. And, to many foreign visitors, an American department store or discount house is an experience in itself . . ."**

Who has an American face?

You do. Yes, you. Whatever your features or opinions.

In fact, to many of the foreign visitors who come to you for help and information, you not only have an American face, you are America's face.

Think about that, the next time you're asked for something difficult or harrassing—particularly if it's on a day when you have problems of your own. Remember, before you answer, that...

one foreign visitor's most unforgettable American memory might easily be you.

AMERICA'S FACE—*The Advertising Council, Inc., a non-profit organization, prepares public service advertisements, such as this, to give tips to the export salesman behind the counters on how to be "America's face" when selling visitors from overseas.*

The Ad Council's campaign is based on a survey among foreign national which was conducted abroad for USTS in 1962. The survey revealed that 50 percent of those questioned thought Americans "noisy," and 40 percent thought they were "materialistic". In addition, 52 percent of the Japanese queried described service in the United States as "poor".

In a 1967 survey for the USTS, 35 percent of the Latin American travel agents interviewed said that clients hesitated to visit the United States because of the language barrier. This same stipulation was made by 25 percent of the European agents and 14 per-

AMERICAN SHOE LEATHER FOR OVERSEAS—*More American shoes and boots can be sold here for overseas wear, if a retail shop offers individual service to a foreign shopper. Such an effort will make U.S. stores an experience for the overseas visitor, opening new markets for "export" sales.*

cent of the Asian agents participating in the survey.

The Council's advertisement cautions sales and service personnel about language barrier problems:

- **"Even if your visitor's native language is English, remember that it's not rapid-fire, American-accented English, so speak slowly.**
- **"If his language isn't English, or another language you understand, see if you can find someone else around who can help.**
- **"No luck? Then try to get him to the nearest tourist information center or Travelers Aid. Or telephone one such organization and put him on the phone . . ."**

Better communication can be built between foreign visitors and retail sales personnel if retail establishments publicize their foreign language resources. A sign in a store window announcing his language is spoken inside is a temptation to trade to a non-English speaking visitor.

USTS' Austin advises, "It's just good business for retail establishments with Spanish, French, German or Japanese-speaking sales personnel to post the fact in their windows. Most people prefer to do business in their own language—if possible."

It has been suggested that on-the-job training programs for sales and service personnel include foreign language courses . . . especially for those employed at gateway airports. Today, any public contact employee who works for a concessionaire at a major airport may have to deal with non-English speaking customers. Foreign visitors departing for their homelands often make last minute purchases of merchandise and souvenir items from airport retail outlets. The sales will be more successful—and the visitors' last impression of the U.S. more favorable—if someone is available who speaks their language. "Selling" consists of more than just taking the customer's money.

The capability of sales and service personnel to communicate with foreign tourists can only grow more important. In 1968, the travel deficit was almost $1.91 billion. In 1969, it was $2.05 billion. Enticing more foreign tourists to this country will help—but the real need is to increase our sales of goods and services to visitors who are arriving now.

"Selling U.S. goods to a foreign visitor not only boosts our current foreign exchange earnings," says Austin, "it gives us a 'living advertisement'—the foreign buyer who will carry our merchandise back to his homeland where his fellow countrymen will see it.

"The retail sales clerk can make or break a sale to a foreign visitor and we should be sure that he is as highly-trained and courteous as we can make him. He is America's face to the visitor from overseas."

—*United States Travel Service*

Air Show Takes Shape

Paris Site Of 1971 International Biennial Event; Commerce Plans Pavilion Housing 75 Exhibitors

As American super jets make more passenger and cargo flights to Europe's mainly standard-sized airports, demands for such planes and for longer runways, larger terminals, better passenger and freight handling systems and advanced electronics, communications and catering facilities will increase.

Estimates by the Commerce Department and the aerospace industry are that over the next ten years overseas sales of transport craft and initial parts will range between $13 and $20 billion. Last year the American aerospace industry accounted for almost 9 percent of the total U.S. exports of $37.3 billion. Western Europe consumes a 50 percent share of all exported American aerospace equipment.

Late next spring, against this background of super jets filling Europe's skies, the U.S. Government will again officially participate in the oldest and largest show of its kind—the International Aerospace Show in Paris. This 29th show since 1909 will be held at Le Bourget Airport from May 27 to June 6. A U.S. Pavilion will provide space for more than 75 companies to exhibit modern aerospace and airport equipment, systems and technology before an international audience.

Among the Federal agencies joining Commerce's Bureau of International Commerce —which will coordinate the U.S. Pavilion— will be the National Aeronautics and Space Administration (NASA). Moon pioneer Neil A. Armstrong, now NASA's Deputy Associate Administrator for Aeronautics, and Robert McLellan, Commerce's Assistant Secretary for Domestic and International Business, recently discussed NASA's contributions to the U.S. Pavilion: space stations, shuttle craft and several systems developed by NASA for use in commercial aircraft.

The Department of Transportation will coordinate the American section of the show's flightline, featuring both commercial and military craft. Other U.S. agencies in the exhibition include the Federal Aviation Administration, Department of Defense, U.S. Travel Service and the Smithsonian Institution. An exhibit is also planned for the Department of Agriculture, featuring "prefabricated" foods.

The Paris Air Show also brings before American aerospace firms a major sales challenge, because it comes at a time when European manufacturers of heavy jet aircraft are becoming increasingly competitive, and cooperation between nations in developing new craft, components and supporting facilities are anticipated having an impact on sales in Europe.

In 1969, exports of both civilian and mili-

PLANNING FOR PARIS—*Checking plans for the Pavilion's lounge are Charles Whitley and Bill Warnes. Whitley is recruiting exhibits for the U.S. show and Warnes is its director of marketing activities. The elliptical Pavilion, now being constructed, will provide display space for 75 American companies.*

tary craft amounted to well over $1.8 billion, with civilian craft recording more than $1.2 billion. Exports of military craft rose 48 percent over 1968 for a total of $601 million.

An elliptical steel and gold-colored permanent structure now being completed will house the exhibits of U.S.-made aircraft components, ground-support equipment, structural components, engines and systems. The new Pavilion is planned to serve the '71 and '73 U.S. appearances, and future displays in this biennial event.

When next year's show opens, at least 500 exhibitors and 13 nationally-sponsored pavilions will surround Le Bourget Airport. Fair officials expect attendance to top the 1969 figure when more than 1.25 million visitors were counted, including several thousand representatives of Europe's aerospace industry.

Also at that show, 61 American firms mounting displays for 86 companies compiled more than $25.1 million in sales the first 12 months following the show.

Limited space is still available in the American Pavilion at the 1971 Paris Air Show. Manufacturers and suppliers interested in displaying the latest in aerospace equipment and systems to Europe's rapidly expanding market should contact Charles Whitley, 202-967-4961, or any Commerce Field Office.

HOSPITALITY WITH A SMILE—*Positioning figures in the mock-up Hospitality Center, a lounge topping the U.S. Pavilion and facing the show's flightline, is Gay Grooms. Holding the display for Gay is the U.S. promotion's director Theodore F. Fiedler. The Pavilion will be installed at the Le Bourget Airport.*

SPACE SPECULATION—*Neil Armstrong, first man on the moon, studies the model of the '71 Paris Air Show's U.S. Pavilion which will include commercial displays and also an exhibits area open to the public. NASA will provide several pieces of space and aeronautical equipment for the Pavilion.*

INTERIOR DESIGNING—*Pavilion design director Charles Shaw places miniature equipment in a model booth as it might appear next year during the show.*

DOMESTIC BUSINESS REPORT

- U.S. census count complete
- Commerce trade adjustment team ready
- New market development program
- Ship construction to get help
- Overseas employees tour U.S.
- A business yielding much money

Final Population Figures Will Help U.S. To Move Forward In The 70s

The official and final count of the American people is complete.

Secretary Stans' delivery of the final 1970 Census Count to President Nixon marks a unique occasion. This population document, which will be used to determine how many Representatives each State will send to Congress in January 1973, includes not only the resident population as it was counted on April 1, 1970, but also a large number of Americans who were serving their country overseas on census day: the Armed Forces and civilian personnel of the Federal Government—and their dependents living with them.

The Commerce Department decided on the inclusion of these overseas Americans in the 1970 census count because it would insure a better carrying out of the Supreme Court ruling of "one man, one vote."

However, unlike the resident population, each of whom was counted at his home address, each of the included overseas population was counted simply as the resident of his home State.

For apportionment only

The larger population count, including these overseas Americans, will be used only to determine apportionment. For all other purposes, the residential count will be used.

The final 1970 Census Count will provide a vast amount of basic information about America and its people. Said Secretary Stans, "We now have a new inventory, a new measuring rod for the changes that have taken place in our society in the decade of the sixties. The job, in the decade of the seventies, is to take advantage of what we now know and move forward effectively to meet the challenges not only of this decade but help widen our vision for the rest of the country."

—Census Bureau

Trade Adjustment Team To Assist U.S. Companies Injured By Imports

What happens when a firm which has enjoyed more than 75 percent of the U.S. market for its product suddenly finds two-thirds of its domestic market captured by a foreign competitor?

If the firm petitions the Tariff Commission for a determination of eligibility for trade adjustment assistance, it might find itself in the hands of a Department of Commerce team of economic physicians assigned to treat financially ill firms injured or threatened by the import of foreign goods.

The injury doesn't have to be as dramatic as this example. Any company seriously hurt by imports could salvage its economic future regardless of the percentage of its market loss.

"Often it's a race against bankruptcy for the company and we make every effort to move as swiftly as possible," says Jack Osburn, staff director of the Trade Adjustment and Assistance Division. "Our first act of assistance to a company might be to provide technical help in preparing its proposal for economic recovery."

Adjustment assistance, a relatively new element of U.S. trade policy, had its origins with the Trade Expansion Act of 1962, but Commerce's Trade Adjustment and Assistance Division directed by Edward R. Killam did not get its first case until 1970. The Tariff Commission, where all applications must originate, approved its first petition in December 1969.

The program's objective, defined by William D. Lee, director of the Bureau of Domestic Commerce, is "to increase the flexibility and mobility of those elements of our economy injured or threatened by increased imports." The program also includes Labor Department assistance for the workers of import-hit industries.

Lee feels that the rationale for making assistance available to those firms injured by imports is that, since freer trade benefits the economy as a whole, the nation should share the cost of any injury resulting from this policy.

The program is not a subsidy. The forms of assistance available are loans, technical assistance and tax relief where the Secretary of Commerce determines that such tax assistance will materially contribute to the firm's adjustment.

An industry or a firm within an industry must take the initial step of petitioning the Tariff Commission for a determination of eligibility. Upon receipt of an affirmative finding or a split decision by the Tariff Commission, the President may certify to the Secretary of Commerce that the firm is eligible to apply for adjustment assistance.

At that point the company may make application to the Department of Commerce, which will conduct an investigation to determine if the firm has suffered injuries resulting from foreign imports. The Department either certifies or denies the firm's eligibility.

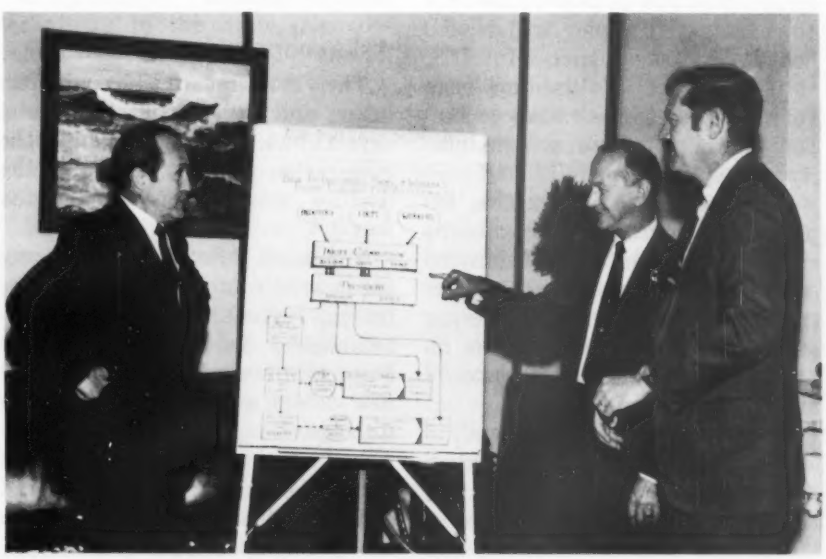
Certification clears the way for the firm to file actual application and begin preparation of its proposal for economic adjustment. Adjustment proposals must describe in detail the firm's plan for becoming competitive and the type and extent of the adjustment assistance requested to carry out the plan.

For example, the firm which lost two-thirds of its domestic market might formulate a proposal for diversification of its production. If the proposal is approved the firm would be aided in obtaining a loan from the Small Business Administration to effect the diversification.

The Commerce Department's "physicians" evaluate the firm's proposal to insure that it is materially contributing to the economic adjustment of the firm, giving consideration to the interests of the firm's workers, and insuring that the company is using its own resources in the adjustment.

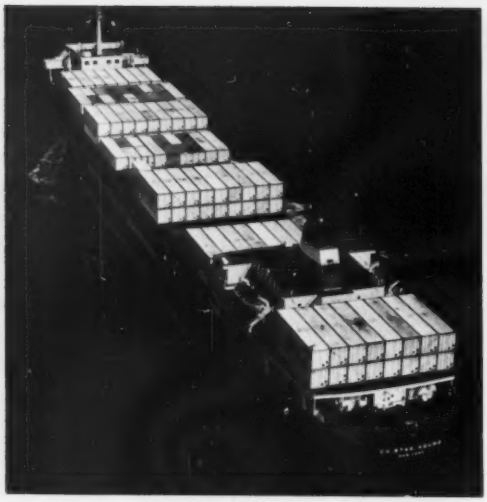
Five firms certified eligible for assistance are a piano company, a producer of barber's chairs, a manufacturer of sheet glass, a shoe company and a manufacturer of ion capacitors. One application has been denied and three are still pending.

—Bureau of Domestic Commerce

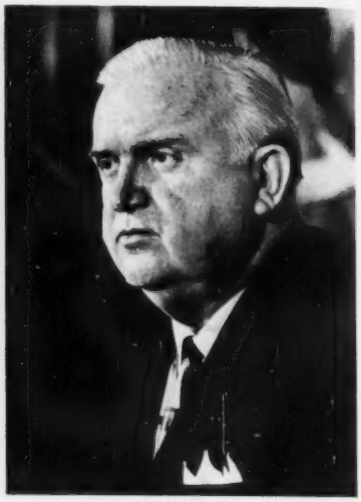


TRADE ADJUSTMENTS DISCUSSED—*William D. Lee, director of the Bureau of International Commerce (left) reviews trade adjustment assistance chart with Edward R. Killam and Jack Osburn.*

James T. Crowley
Director, Office of Market Development



U.S. Merchant Marine
Modern, Efficient, Productive



Paul Hall
President, Seafarers International Union

Maritime Sets Up New Market Program To Bring More Cargo To U.S.-Flag Ships

"New ocean transport technology and its consequent productivity will require new talents and techniques for industry management to run ocean shipping services profitably," says James T. Crowley, Director of the Maritime Administration's Office of Market Development.

The success of the new maritime program which calls for the construction of 300 ships over the next 10 years, says Crowley, will depend heavily upon how successful U.S. shipowners are in obtaining large volumes of cargo necessary to support the increased carrying capacity of the new ships.

Recognizing that marketing expertise in attracting oceanborne cargo is as essential as improved cargo-handling systems, the Office of Market Development is offering assistance to U.S.-flag carriers on both an industry wide level and on an individual basis.

"Our office does not intend to solicit business for individual carriers," says Crowley, "but will strive to establish good working relationships between shippers and carriers."

Crowley's office is presently examining existing marketing capabilities which are described as the ability of steamship management to manipulate technology for the profitable accommodation of cargoes. Efforts also are being directed toward gathering and analyzing statistical data on cargo movements to help identify situations where vital shipper support is lacking and American-flag services could be utilized.

Asks cooperation

The end result, if industry, labor, and government cooperate, says Crowley, should lead to "the restoration of our Nation as the leading maritime power in the world."

To assure U.S.-flag vessels a major portion of oceanborne commerce, regional offices have been established in New York, San Francisco, and New Orleans, and new offices will soon be opened in Chicago, Los Angeles, and Seattle. The offices are the contact point between the shipper community and carrier personnel while providing the Washington headquarters information concerning shipper needs and carrier capabilities.

Stressing the importance of the new Market Development program and its regional offices, President Paul Hall, of the Seafarers International Union, says, "We must now devote our full energies to aiding the Department of Commerce in its campaign to bring cargo to a fleet of modern, efficient American-flag vessels. A great increase in cargo is necessary to reap the full benefits of the tool Congress had made available."

In a recent letter urging American businessmen to increase their use of U.S.-flag merchant ships, Secretary Stans said, "Our merchant marine is important to the trade and security of our Nation, and warrants the support of American businessmen." The Secretary pointed out that the President's new maritime program will apply new ship technology to give this country "one of the finest and most modern merchant fleets."

Crowley feels that the time had come to stress the positive side of the U.S. Merchant Marine, ". . . to establish a different image—that of a modern fleet." With more than 150 full or partial container ships now in service plus the authorization for the construction of 300 new ships, Crowley's office has a lot to sell.

—Maritime Administration

President Launches Georgia Laboratory

On a recent visit to the new marine center on Skidaway Island, Ga., President Nixon observed that "it is one that will help to develop the enormous resources of our seas, of our waterways and, tell us, through the experiments that are made, how we can, in effect, in terms of agriculture, grow things in the sea."

The Skidaway project is one of three marine facilities being funded by the Department's Coastal Plains Regional Commission, a Federal/State partnership whose mission is to plan, promote, and improve the economic growth in the coastal areas of North Carolina, South Carolina, and Georgia.

In addition to the new Skidaway Island center, the Commission has made grants for the construction of marine science facilities in Morehead City, N.C., and in Charleston, S.C., to expand research, training, and educational facilities related to marine science and engineering.

The Skidaway project, which President Nixon dedicated Oct. 8, will serve as the headquarters for marine extension programs on the Georgia coast. The Center's objectives will be to assemble, select, interpret and transfer scientific and technological information concerning the use of coastal resources to public and private organizations. Its programs will be coordinated with the research activities of the Skidaway Institute of Oceanography and those of the Marine Institute at Sapelo Island.

In North Carolina, the Morehead City Sea Lab will involve seafood research and development and inspection management programs aimed at conserving the fisheries economic and ecological position in the coastal plains region.

The South Carolina Wildlife Resource Commission's Marine Center, located at Fort Johnson in Charleston Harbor, is responsible for supervising and inspecting shellfish leases through the Office of Marine Conservation, Management and Services. The Center also conducts management programs, issues commercial fishing permits, and is responsible for surveying and engineering projects.

The South Carolina center, which has become the fountainhead for the practical application of marine management and conservation techniques in the State, also develops basic research programs in marine ecology, fisheries biology, marine geology, physical and chemical oceanography and related fields in engineering and economics.

Because there are no Federal grant-in-aid programs for the construction of such facilities as those in Morehead City, Charleston Harbor, and on Skidaway Island, the Coastal Plains Regional Commission funds the marine centers under the demonstration grant authority of the Regional Action Planning Commission Amendments of 1969, administered by the Department of Commerce.

—Coastal Plains Regional Commission

A PRESIDENTIAL ASSIST—*President Nixon stressed the importance of tapping the potential of the nation's marine resources in dedicating a marine science facility on Skidaway Island near Savannah, Ga. recently.*

Maritime Insurance Rise To Aid Industry

The $2 billion increase in the amount of mortgage insurance authorized under the new maritime act "will present a comparatively risk free method for the investment community to participate in the expanded ship building program," says Assistant Secretary of Commerce for Maritime Affairs, A. E. Gibson.

The Ship Mortgage Insurance program, established in 1938 to help underwrite the high cost of shipbuilding, has produced more than $2.3 billion worth of business for American shipbuilders. Program spin-offs include substantial employment for seamen and maritime workers ashore, and the investment of more than $1.3 billion of private capital in the U.S. Merchant Marine, in addition to the equity of the shipowners.

Currently, applications are being processed for insurance of 43 ships and 565 barges, for an estimated total of $258 million. As of June 30, ship loan and mortgage insurance contracts and commitments in an original principal amount of

over $1.1 billion, covering 171 ships and 360 ship-carried lighters, were in effect—an increase of 13 ships since December 1969. Total outstanding principal balances of contracts and commitments to insure were approximately $912 million.

Retained income in the insurance revolving fund as of June 30 was $25,129,664. The retained income is held as a contingency fund for such instances as, for example, the defaults which the agency has to cover. Since the passage of the Merchant Marine Act in 1936, there have been eight defaults out of a total of 558 ships. Seven of those ships are now in service.

The Maritime Administration is authorized to insure loans and mortgages not to exceed 87½ percent of actual cost of: (1) passenger vessels, designed to be of not less than 1,000 gross tons and capable of a sustained speed of not less than eight knots, to be used solely on inland rivers and waterways, (2) oceangoing tugs of more than 2,500 horsepower, (3) oceangoing barges of more than 2,500 gross tons and (4) other vessels of not less than 3,500 gross tons and capable of a sustained speed of 14 knots.

On ships not meeting these requirements, and on those built or rebuilt with a construction subsidy, the agency may insure loans and mortgages for up to 75 percent of the actual cost of building or rebuilding.

—Maritime Administration

An Industry Overseas Travel Program Brings Employees Over Here

A U.S. corporation with international interests can bring foreign visitors to this country, offer its overseas employees special sales and vacation incentives, contribute to a favorable U.S. balance of payments and, at zero cost to the firm, increase its sales.

One firm's "success story" is the subject of a brochure being designed by the United States Travel Service of the Department of Commerce. The brochure, which will be available early next year, describes how Culligan International, specialists in water conditioning and purification processes, organized a highly sucessful sales and vacation incentive tour.

Nearly 800 of Culligan's overseas employees, dealers and distributors were among the 3,000 company people who came to Chicago to attend the firm's first world convention, which was held in a new multi-million dollar headquarters complex. For the group from abroad, the convention was an integral part of an 11-day, five-city VISIT USA program with stopovers in Washington, Philadelphia, New York and Niagara Falls. Culligan's program brought nearly $500,000 into this country—money which may otherwise never have come here.

Capturing a bigger slice of the estimated $500 million which U.S. firms are spending on sales and vacation incentive travel programs, is one objective of the U.S. Travel Service's brochure.

Another objective is to attract foreign visitors to the United States for the 1976 bicentennial celebration. Timing the new brochure for publication early in 1971 is ideal for encouraging foreign travel to this country in 1976 since, according to the U.S. Travel Service, a successful incentive program requires about from two to five years to organize.

For additional information on the USTS effort to attract foreign tourists to the U.S., see *New Welcome Mat For Overseas Visitors*, page 15.

Culligan says the whole tour cost the company nothing. Most participants paid in advance for their trip through a payroll deduction plan. The remaining participants are sales competition winners receiving free tours by overseas dealers or distributors. Yet, at no expense to the company, Culligan's VISIT USA program abroad boosted its sales 20 to 30 percent.

—United States Travel Service

Lowly Catfish Comes Of Age

To the Southerner, the channel catfish remains a traditional, wholesome food; to the epicure, it is becoming a gourmet delight; to the sport fisherman, it often offers a rare and happy challenge; and to the fish farming industry, the channel catfish means money.

According to a report, "A Program of Research for the Catfish Farming Industry," from Commerce's Economic Development Administration, catfish farming is yielding an annual harvest of 22 million pounds from 25,000 acres —a yield that is expected to double within the next few years.

FISH FARMING — *An annual harvest of 22 million pounds of catfish*, negotium reditum pecunpecunia magna.

The channel catfish, a scaleless fish with barbels resembling the whiskers of a cat, is one of 30 species of the largest of all fish families. Although it can grow as large as 20 pounds, its average weight ranges between three and four pounds.

About 90 percent of all commer-

cially cultured catfish is sold to operators of recreational fishing ponds, with only 10 percent going to the food industry. The report found "an unexpectedly strong consumer demand for catfish through conventional supermarket distribution" and a need for the industry to concentrate on restaurant and institutional trade. The report also discovered the supply of wild catfish on the decline in the heart of the catfish market, opening new doors for the profitable exploitation of commercial fish farming in these areas.

Although fish farming is not new (historians have recorded fish farming in China as early as 500 B.C.), the expansion of catfish farming has delivered a challenge to the industry. More efficient and economical means of pulling in the harvest should be developed, and mechanized equipment for dragging need to be modernized. Mechanical harvesting and skinning machines are already in use.

A technical assistance program for catfish farming is being conducted by the Department of Interior's Bureau of Commercial Fisheries with financial aid from EDA. EDA's participation was requested by the Catfish Farmers of America, Little Rock, Ark.

The catfish study, which was made for EDA by the Bureau of Commercial Fisheries, covers a 12-State area where more than one-million acres have been discovered to be highly suitable for commercial fish culture. The areas include parts of Mississippi, Arkansas, Alabama, Georgia, Kansas, Oklahoma, Texas, Missouri, Illinois, Indiana, Kentucky, and Tennessee.

With catfish farmers reporting production as high as 2,000 pounds of fish to an acre and a market for more than they can produce, the EDA report points out that the potential for economic development of an area for catfish farming offers an opportunity "for extremely attractive levels of profitability and return on investment."

—Economic Development Admin.

Calendar For Businessmen

Dec. 1-2—Chicago—Industrial Marketing Workshop and Seminar, sponsored by Crain Communications Inc., at Marriott Motor Hotel, 8535 Higgins Rd.

Dec. 2—Atlanta—Census User Conference. For information contact Irvine Morris, Department of Commerce Field Office, 75 Forsyth St., NW, Atlanta, Ga. 30303. Phone 404-526-6303.

Dec. 2—Boise, Idaho—Census User Conference. For information contact George Blessing, Department of Commerce Field Office, 217 Old U.S. Courthouse, 520 SW Morrison St., Portland, Oregon, 97204. Phone: 503-226-3421.

Dec. 2—Nashville, Tenn.—Census User Conference. For information contact Robert Hobson, U.S. Department of Agriculture, Box 1250, Nashville, 37202. Phone: 615-242-5419.

Dec. 3—Denver, Colo.—Census User Conference. For information contact John G. McMurtry, director, Department of Commerce Field Office, 165 New Customs House, Denver, Colo. 80202. Phone: 303-297-3246.

Dec. 4—Charleston, W. Va.—Census User Conference. For information contact Frank Justice, Department of Commerce Field Office, Room 3000, New Federal Building, 500 Quarrier St., Charleston, W. Va., 25301. Phone: 304-343-1375.

Dec. 11—Rock Island, Ill.—Census User Conference. For information contact Bi-State Planning Commission, 1504 3rd Ave., Rock Island, Ill., 61201. Phone: 309-788-6338.

Dec. 16—New York City—Overseas Environmental Marketing Seminar. For information contact Department of Commerce Field Office, Federal Office Building, New York, N.Y. 10007. Phone: 212-264-0634.

Cocoa Statistical Report To Be Offered To Industry

"Please include us on your mailing list."

This request is pouring into the Commerce Department from trade journals, government agencies, and foreign embassies in Washington, as well as industries that require the new cocoa statistical reporting service of the Bureau of Domestic Commerce.

The service, lauded already as a business aid by such firms as the New York Cocoa Exchange, the Chocolate Manufacturer's Association and the National Confectioners Association, will provide cocoa product importers and exporters, brokers and investment houses with highlights of U.S. foreign trade in cocoa and cocoa products. Included in the monthly reports will be data on poundage and dollar value of imports of cocoa beans, cocoa products and confectionary containing cocoa or chocolate, together with information on U.S. exports of cocoa products and cocoa or chocolate confectionery.

Thornton B. Moore, whose Consumer Products Division has been regularly providing this type of statistical report to the coffee industry, says that, to the best of his knowledge, "this is the first time this type of service has been offered to the cocoa industry."

Intended as a comprehensive round-up of foreign trade import-export data in the cocoa market, the report will enable its users to study trends in U.S. imports, assess the average value per pound of these imports, and to learn which countries are the U.S. major suppliers.

Detailed statistics, including imports by country of origin and exports by country of destination, will be available without charge upon request from the Consumer Products Division, Bureau of Domestic Commerce, U.S. Department of Commerce, Washington, D.C. 20230.

—Bureau of Domestic Commerce

SCIENCE & TECHNOLOGY REPORT

- Synthetics seen answer to food production
- Magnetic data buoy may help oil probe
- Government scientists seek improved crop fertilization
- Picnic cooler standard aims to save children
- Patents of special interest

Synthetics Seen Possible Answer To World's Food, Feed Production

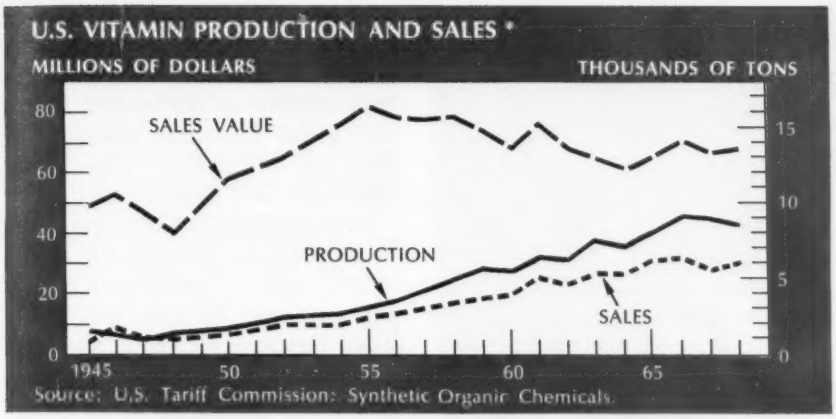
With the earth falling farther and farther behind in natural production of food for its present and projected population, systematic development of the synthetic food and feed industry seems to offer one of the best approaches to prevent starvation. At the National Bureau of Standards, a statistical survey of food/feed industry growth and potential is being conducted by the Institute for Materials Research.

Synthetic food products have been classified into three categories for purposes of the survey: small-volume/high-unit-value items, intermediate - production/intermediate-value items, and large-volume/low-unit-price items. Special attention is being given to analyzing the production of ingredients making synthetic foods pleasing to national and regional populations in terms of texture, consistency, odor, color, and taste.

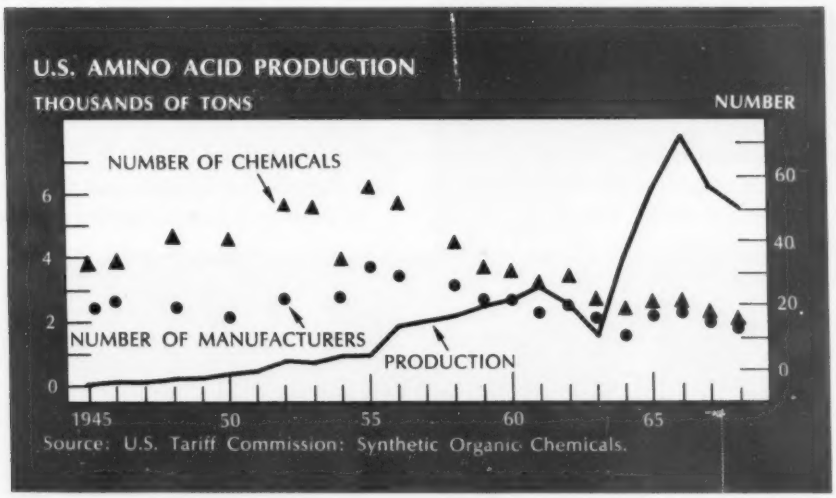
"Food" is defined in this study as any item that enters the human diet. At present, synthetic foods are used primarily to supply essential nutrients that are lacking in natural products, but many planners hope that the industry can become a significant source of world food supply if necessary. Synthetic foods and feeds do not depend directly on the land, but are produced by chemical synthesis and by biochemical methods from industrial and agricultural waste products, liquid petroleum, and natural gas.

Vitamins and amino acids are currently most prominent among items in the small-volume/high-unit-value category. They range from vitamin B_{12}, of which 3,000 pounds selling at $3,071 per pound were produced in the United States in 1968, to the amino acid, methionine (and its hydroxyl analog), of which 5.098 tons were sold in the same year at 65 cents a pound. In spite of the seemingly exorbitant prices of some of the vitamins and amino acids, the very small quantities required in the diet add only a few cents to the cost of food products in which these items are used as fortifiers.

Improved manufacturing processes have led to a lowering of prices over the years, and lower prices bring greater demand and increased production as the manufacturer controls output to meet demand. This is one of the advantages of synthetic over natural foods, since the synthetics do not depend on the caprices of nature. 1968 vitamin production was six times that of 1945, and over the years 36 manufacturers have pro-



* The data are those for medical chemicals in bulk; they do not include finished preparations such as tablets and capsules manufactured from bulk chemical.



duced one or more of these items. Amino acid production, the figures show, is currently some 80 times higher than in 1945.

Synthetic flavors and dyes, according to the study, have been prominent in the food market longer than any of the other synthetic materials surveyed and 99 percent of the dye industry is now synthetic.

Single-cell proteins presently dominate the intermediate-production/intermediate-value category. Using the quantity and value of shipments as a measure of U.S. production, it is found that in 1963 50 million pounds were shipped, of which 35 percent was food yeast. Thirty-five countries currently have production facilities for yeast products, but there is prospect for large-scale production involving the culture of single-cell organisms on petroleum. Specialists note that just two percent of the yearly output of crude petroleum would suffice to produce the protein requirements of two billion people.

Urea is currently the only commodity in the third category, large-volume/low-unit-price items. It was the first natural substance to be made from nonliving materials, and is today produced in the greatest amount while selling at the lowest price of all synthetic materials. In the light of continuing demand for urea as a cattle feed and as an agricultural fertilizer, it is expected that world capacity for urea production should reach 12-16 million metric tons in 1970, selling at three to four cents a pound.

—National Bureau of Standards

Magnetic Data Buoy May Help Oil Probe

Navigation and oil exploration may be significantly improved by an unmanned, ocean-moored sensing system for recording and measuring the earth's magnetic field recently tested in the Bering Sea by Commerce's National Oceanic and Atmospheric Administration.

The ocean-moored system provides a more reliable method of measuring and recording variations in the intensity of the earth's magnetic field, allowing data to be obtained without interference from the abnormally high magnetic vibrations associated with the sea floor or from man's normal environmental activities. Previously, information was gathered by a magnetometer towed behind a vessel, supplemented by sensors on surrounding land or the ocean floor.

The new system involves a sensor suspended 30 feet above the ocean floor and a buoy containing electronic equipment, batteries and a recorder. The buoy can remain at sea recording data for up to 90 days. Recent tests continued for a month off the Alaskan coast.

The importance of this new method to navigators is its ability to improve the precision of magnetic charts used in air and sea navigation. To the oil industry, it may aid exploration programs by making it possible to gather data in geographic areas where it is difficult to obtain such as the oil-rich Arctic, according to Anthony J. Goodheart, chief of the Rockville, Md., branch of NOAA's Office of Systems Development Engineering Development Laboratory which developed the ocean-moored magnetometer. Goodheart supervised the Bering tests.

—NOAA

Government Scientists Seek To Improve Crop Fertilization To Save The Farmer Money, Eliminate Pollution In Streams

Government scientists at Commerce's National Bureau of Standards are developing standard reference materials to aid in improving the analysis of leaves and grasses for trace elements. Such analysis will assist farmers and growers in determining the proper amount of fertilizer for a given field or grove, and in studying effects of trace elements on biological materials.

It will also save the farmer money and prevent excessive use of fertilizer, which would pollute rivers and streams.

This work was undertaken at the suggestion of the American Society of Horticultural Science and the American Society of Agronomy.

Under NBS contract, Professor A. L. Kenworthy of Michigan State University has been collecting, drying and pulverizing about 3,000 pounds of orchard leaves, citrus leaves, tomato leaves, alfalfa, pine needles and aspen chips to be used in the standard reference materials. The magnitude of Professor Kenworthy's work can best be illustrated by pointing out that a full-grown apple tree bears only 50 pounds of undried leaves.

This vast labor on Professor Kenworthy's part and those of the other scientists involved has been necessary, since sound conclusions for purposes of farming and fruit growing can be made through scientific appraisal of the key chemical elements by means of chemical analysis. This appraisal, to be reliable, depends on frequent calibration of the equipment, using the standard reference materials.

Since the collection and preparation of the botanical samples involves prodigious effort, the samples must be regarded as irreplaceable. Thus, the possibility of insect attack, mold or other bacterial growth represents potential disaster. Arrangements were therefore made with the U.S. Army Natick Laboratory to sterilize these samples by means of gamma irradiation. In an outstanding display of teamwork, the Natick Laboratory processed and returned the samples to NBS in about two weeks.

For the sterilization by gamma irradiation, specially packaged samples were wrapped inside fiber board drums no more than 15 inches in diameter. The process involved placing these drums on a specially designed platform with a shielded irradiation cell. The materials were then subjected for 102 minutes to a total of about 4.9 megarads of radiation. Thus treated and stored in their sealed bags, the samples are expected to remain stable for many years.

At the NBS laboratory complex near Gaithersburg, Md., work is now in progress to determine the homogeneity of the chosen leaves and grass for three elements of differing chemistry — manganese, potassium and phosphorus.

Current plans call for issuing the orchard leaves, analyzed for 11 elements, with a provisional certificate this year. Included will be the usual fertilizer elements, nitrogen, phosphorus, potassium, calcium, and magnesium, certified at an accuracy level of 1 percent, plus six more important trace elements—manganese, iron, copper, boron, arsenic and zinc—certified at a 5 percent accuracy level. Citrus leaves are next in line for homogeneity work.

Eventually all of these botanical materials will be available as certified standard reference materials.

—National Bureau of Standards

STERILIZING PLANTS—*A government scientist prepares botanical materials packaged in fiberboard containers prior to applying gamma radiation which sterilizes the plant material to prevent decay, fungus growth, and hatching of insect eggs. This was part of a project aimed at certifying the materials for their chemical composition required by the National Bureau of Standards to achieve better methods of crop fertilization. Not only can such work be expected to save money for the farmer, but it is also intended to prevent the use of excess fertilizer which eventually would pollute rivers and streams.*

Picnic Cooler Standard Aims To Save Children

Portable picnic coolers have proven to be death traps for small children who innocently find them likely play places during the picnic season, on fishing or camping expeditions or while stored in the attic or cellar awaiting summer usage.

Many present picnic coolers lock automatically once shut and a trapped child can easily be suffocated. In recent years, at least 16 children have suffered that fate across the nation.

As a result, scientists at Commerce's National Bureau of Standards have developed several methods of providing easy egress from the boxes if a child becomes entrapped. One is shown in the accompanying photo providing a plastic safety window in the lid which can easily be broken out with little pressure. Built-in dividers have also been suggested prohibiting a child from crawling into the boxes in the first place.

A recommended Voluntary Product Standard for portable picnic coolers is presently being circulated to the manufacturers of these boxes for their acceptance. The standard includes safety features, in the form of performance requirements, that will permit internal release from the coolers. Compliance with these requirements will ensure that children who may become accidentally trapped will have a means of escape available to them. A test for determining the force required to release the closure is included as well as methods of identifying products which conform to the standard.

Copies of this recommended Voluntary Product Standard, designated TS 196, are available without charge from the Product Standards Section, Office of Engineering Standards Services, National Bureau of Standards, Washington, D.C. 20234.

Industry has also agreed to conduct an educational campaign to alert parents to the potential hazards involved.

—*National Bureau of Standards*

PRETTY JEAN-IN-THE-BOX—*Four-year-old Jean-Marie Koster of McLean, Va., pops out a plastic safety window with her tiny fists demonstrating how easily a young child can free himself from a locked portable picnic cooler in which he may be trapped while playing. This safety device has been developed by scientists at Commerce's National Bureau of Standards as one solution to a problem which has cost the lives of at least 16 children in recent years.*

Trademark Affairs Committee Named To Advise Commerce

A Patent Office Trademark Affairs Committee has been appointed by Secretary Stans to serve as a public advisory body to the Commerce Department.

The nine-man committee, chaired by Frank E. Foote, Mine Safety Appliances Co., Pittsburgh, Pa., includes: Anthony R. De Simone, Merck & Co., Inc., Rahway, N.J.; A. L. Snow, Chevron Research Corp., San Francisco, Calif.; Paul Hoffman, General Electric Co., New York; Clarence R. Patty, Jr., Corning Glass Works, Corning, N.Y.; Bert Collison, Nims, Halliday, Whitman, Howes, Collison & Isner, New York; Henry W. Leeds, Mason, Fenwick & Lawrence, Washington, D.C.; Robert B. Whittredge, Fish & Neave, New York; and William L. Mathis, Burns, Doane, Benedict, Swecker & Mathis, Washington, D.C.

Patents Of Special Interest

Recent patents issued by the U.S. Patent Office included:

—**A refuse compactor.** A domestic refuse compactor which includes a drawer where household refuse is compacted by a ram to a fraction of its normal volume. The refuse is compacted in a bag permitting the compacted refuse to be removed as a wrapped package for disposal. Patent No. 3,537,390 was issued to Lester H. Hinkel, Benton Harbor, Mich., Gordon H. Brown and Robert M. Chandler, St. Joseph, Mich., and assigned to Whirlpool Corporation.

—**A new form of nylon.** The nylon trademarked Aviamide will improve the stability of paints and inks and provide a tough coating for paper. Nylon fibers or pellets are treated with acid and mechanically beaten until the microcrystals are so small that 254,000 can be squeezed into one inch. Dispersed in water and then dried, they can be cast into shapes having great strength. The material, formed into a transparent coating less than one thousandth of an inch thick, has been used experimentally for insulation and fiber-glass yarns in tire cord. Patent No. 3,536,647 was issued to Orlando A. Battista and assigned to FMC Corporation, Princeton, N.J.

—**A lawn edger.** A power-driven lawn edging and trimming device that may be selectively adjusted to cut and trim a lawn to a uniform height on either the left- or right-hand side of the machine. Patent No. 3,537,244 was issued to Bob J. Hicks, Lynwood, Calif.

—**Automated car washer.** A car washing, rinsing and waxing apparatus, coin operated and programmed to drive a power unit about an overhead loop track in successive cycles to wash, rinse, and then direct a wax-containing solution onto the vehicle. Each successive cycle can be programmed for length of operation. Patent No. 3,537,423 was issued to Glenn H. Burden, Gainesville, Texas.

—**A cleaning pad.** A soft resilient compressible polishing pad to be used for buffing aluminum, paint, wax, plastic and other similar surfaces. The pad is composed of a lofty fibrous nonwoven structure bonded by a soft, tough resin containing a finely divided soft mineral filler. Patent No. 3,537,121 was issued to Thomas R. McAvoy, Stillwater, Minn., and assigned to Minnesota Mining and Manufacturing Company, St. Paul, Minn.

—**An instant warehouse.** A durable prefabricated building that can be taken down, moved and set up again as many as 25 times. The form illustrated is semicylindrical with arched ribs raised and joined by horizontal bars. Weatherproofed panels are added for the roofing and sides. The wood is treated with epoxy resin. Patent No. 3,535,834 was issued to Walter B. Nichols of Bridgeport, Conn.

—**A novelty toy duck.** A toy duck which simulates actions and noises of a live duck, remotely controlled by a whistle. The duck has a cam-actuated noisemaker controlled by its driving motor which allows it to quack in sequential groups more like a real duck and has a bill action coordinated with the quacking sound. The waddling motion of the duck is controlled by a whistle. Patent No. 3,538,639 was issued to Patrick M. Tomaro of Maplewood, N.J., and assigned to Remco Industries.

—**A salt water irrigation system.** Salt water is piped through a field at the depth of crop roots with the sides of the trough being solid to the height of the water and perforated above that point. Fresh vapor passes through the perforations into the soil, condensing on the plants at night. Part of the salt water is evaporated by ground heat. It is thought the system should be most successful in desert regions with hot days and cool nights. Patent 3,528,251 was issued to David C. Falk, Newport News, Va.

In addition to patents the Patent Office also registers trademarks for goods and services used within interstate commerce. Among the recently published trademarks were: "Whippersnapper" for fabrics, "Gold Diggers by Happy Legs" for pants, "Prank" for lipstick, "The Foolers" for paint roller covers, "Skinnies" for hosiery, "Kick the Bucket" for floor cleaning preparation, and "Guzzler's" for snack foods.

Abstracts and drawings of patents are published as they are issued in the Official Gazette of the United States Patent Office *each Tuesday. About 1,600 patents are issued each week. Copies of the* Official Gazette *may be obtained from the Superintendent of Documents, Government Printing Office.*

Science Calendar

May 10-14, 1971 — Gaithersburg, Md.—National Bureau of Standards, Flow—Its Measurement and Control in Science and Industry. Cosponsors: American Institute of Physics, American Society of Mechanical Engineers, Instrument Society of America.

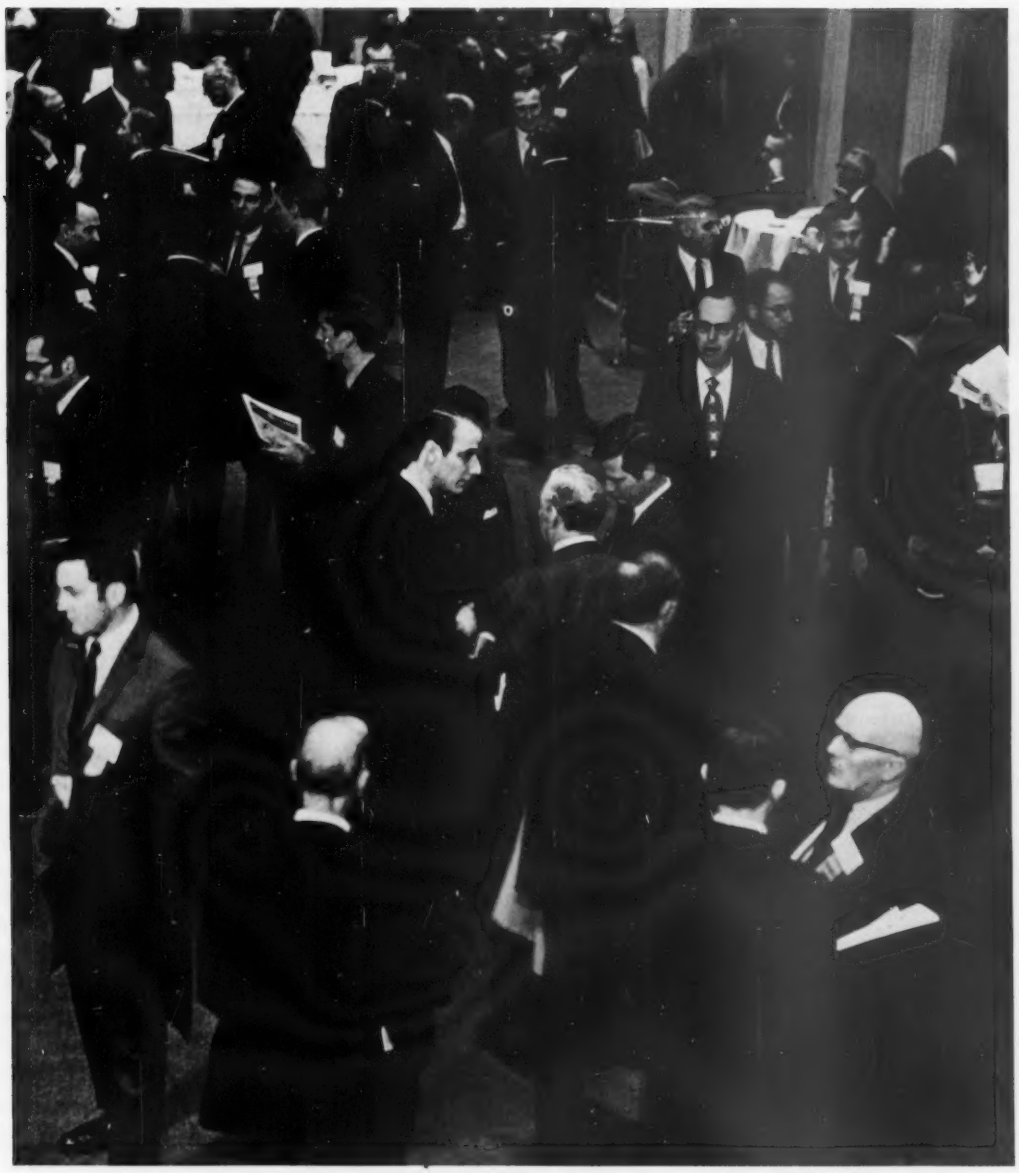
June 16-18, 1971 — Gaithersburg, Md.—National Bureau of Standards, Summer Symposium in Analytical Chemistry. Cosponsor: American Chemical Society.

June 21-24, 1971—Washington, D.C. —Fifth Symposium on Temperature, Its Measurement and Control in Science and Industry, Sheraton Park Hotel. Sponsors: American Institute of Physics, the Instrument Society of America, and the National Bureau of Standards.

NOVEMBER 30, 1970

International Commerce

- Traders meet amid national policy debate
- U.S. share of world trade in manufactures
- Franchising promise seen in Latin America
- Economic reports from a dozen countries



NFTC Ponders Future Of U.S. Trade Policy

Page 35

International Trade Winds

Company News

COMPUTERS—A Sperry Rand Univac computer at the Univac Advanced Systems Computer Center in Rome is assisting in a project to increase the development and utilization of the water resources in Sicily. The Philadelphia firm's computer, through information stored in its files, will be used to plan the integrated use of water resources for drinking, agriculture and industrial purposes. The project is being coordinated by the Italian Government Office for Agricultural Expansion and the Hydraulics Institute of the University of Catania in Sicily.

EXTRACTIVE INDUSTRIES—W. R. Grace & Co., New York, formed a new operating group, named the Natural Resources Group, which will supervise the firm's investments in Peru and Bolivia, activities in other West Coast countries in Latin America, international petroleum operations and ore and mining activities. The Group has five operating divisions: Ore & Mining, Petroleum, Paper, Latin American Chemicals, and the Latin American Division.

MINING—Dravo Pty. Ltd., Australian subsidiary of Dravo Corp., Pittsburgh, will begin construction of an iron ore crushing and pelletizing facility at the $300 million Cliffs Robe River Iron Ore Associates Project in Western Australia. The facility will have an annual production of 8 million tons of pellets and fines by 1973, and more than 10 million tons by 1975. Under a contract valued at well over $60 million, Dravo will provide raw ore storage facilities and handling equipment; primary, secondary and tertiary crushing facilities; the pelletizing plant; and related facilities. The new complex will be built at Cape Lambert on the Indian Ocean. The Robe River Project is an international joint venture between U.S., Japanese and Australian interests.

CONSTRUCTION—The Lummus Co., Bloomfield, N.J., received a contract from the National Iranian Oil Co. for the design, engineering, procurement and construction of a lube oil complex in Tehran; the project is valued at $28 million. The new installation, one of the largest in Iran, will be capable of processing over 2,300 barrels per day of Iranian feedstocks into several grades and types of lube oil; the entire plant output will be consumed locally. The complex is scheduled for completion in March 1972. Lummus is a subsidiary of Combustion Engineering.

Newsmemo

A sales lead in our Foreign Trade Opportunities columns for process control equipment wanted in the Netherlands brought an Oklahoma company orders for $400,000. Another trade opportunity originating with U.S. Foreign Service contacts in the Netherlands, this one for an agency for materials handling equipment, has resulted in $100,000 in initial sales and a licensing agreement. Perhaps more significant than these reported first sales is the word that orders are continuing.

Greetings to Vol. 1, No. 1 of the Port of Oakland's publication, Transportmonthly, which promises to review the land, sea and air transportation developments related to the California city. Although Oakland can claim historical connections with literary voyagers Richard Henry Dana, Robert Louis Stevenson and Jack London, it describes itself as having a "scant past—boundless future." One indicator of this future: container shipping, 1965: 375,000 tons; 1969, 3,001,072 tons.

Look for further business promotions by Commerce specialists in East Europe next year, based on experiences this year at four trade fairs. Business information Offices operated at Poznan, Poland; Brno, Czechoslovakia; Zagreb, Yugoslavia, and Bucharest, Romania helped promote the products of about 1,000 U.S. companies. Catalogs from these firms provided the link to American technology for the trade officials and technicians who visited the U.S. offices.

The $40 million mark in immediate and 12-month projected sales at a U.S. commercial exhibition overseas was passed this fall in Tokyo, and a $50 million plateau has now been reached in Germany. The Tokyo show was centered on computer equipment; the German show, at Munich's Electronica '70 fair this month, displayed U.S. electronics items. At Munich 13 of the 48 exhibiting firms were seeking reps—10 such agreements were signed by show's end, and 45 others were still under negotiation.

Latest in a series of Commerce Department marketing promotions in Mexico was a business equipment show at Mexico City this month that drew 7,000 businessmen to the displays and to a related management systems symposium sponsored by the Institute for Management Science. About $11 million in sales is expected to result from this effort in the next year, report the 32 participating firms. And coming next fall . . . the new Mexico City Trade Center.

NOTE: This column previews or underlines special aspects of world trade developments, with a particular focus on Bureau of International Commerce export and investment promotions. It is not intended to substitute for the detailed reporting and analysis in our regular news columns.

Business Unit Weighs Future Of U.S. Policies On Trade

Talk of the trade bill dominated this year's National Foreign Trade Council convention—in the major addresses, panel discussions, corridor huddles and in the adoption of the formal declaration.

At the windup session, Secretary of Commerce Maurice H. Stans received warm applause when he stressed this point:

"Whatever trade bill is enacted, the Nixon Administration will do everything possible to prevent us from getting into a trade war with other nations. We will sit down with them and negotiate."

Secretary Stans, in his address, put strong emphasis on overcoming the emotionalism that he views as obscuring realities in the trade policy area.

"We are not faced with a simple choice between 'free trade' on the one hand and 'protectionism' on the other," he explained. "Absolute free trade is a myth that does not exist anywhere in the world, and classic protectionism is a self-destructive device which has no place in the 20th century."

Secretary Stans continued: "Somewhere in between lies the reality we seek. We are at a point where our trade policies must be realistic, in the light of conditions which prevail. They must take into account the attitudes of others, and they must reflect our own self-interest."

The Secretary then offered to the members of this oldest and largest organization in the U.S. international commercial community five steps that he said could bring modernization into U.S. policy:

► First, reevaluate U.S. relationships involved in the GATT and seek the reciprocal application of its rules.

► Second, achieve better means and techniques for United States business and labor to adjust to the impact of sudden trade changes.

► Third, build the credit capacity and the tax equality needed to expand U.S. exports.

► Fourth, redouble U.S. efforts to bring down non-tariff barriers, everywhere in the world.

► Fifth, while the U.S. is reasserting its own national self-interest in trade, make clear to other countries that it stands willing to achieve harmonization with their views in every way possible to improve the international flow of commerce.

At the same dais, San Francisco banker Rudolph A. Peterson, in accepting the NFTC's 1970 Dollar Memorial Award, had echoed warnings expressed at almost every other session of the convention. He declared:

"It seems unbelievable that our country among others is now seriously considering taking backward steps toward trade restrictions and protectionism. It seems incredible that we would knowingly take such steps as would lead to retaliatory restrictions, tariffs, counter-tariffs, and possibly all-out trade war.

"Dislocations and inequities do exist. They are being felt in some industries in our country. But we here know that arbitrary restraint of trade is not the lasting answer. We need to practice constraint while we search for new ways of adjusting inequities resulting from international competition. In the meantime, transitional relief may be needed for certain industries and their employees—to assist them in shifting to more sustainable production or services. However, we must be wary of taking measures that may become irreversible."

Trade Bill Details

The November monthly summary of official actions affecting trade, including legislation, will be presented in the Dec. 14 issue. Readers are reminded that the Sept. 7 issue of* International Commerce *carried a 4,000-word point-by-point summary of the proposed Trade Act of 1970 passed by the House on Nov. 19.

Convention declaration

In its declaration, the convention supported basic elements of the Administration's proposed Trade bill, but opposed many features of the Mills bill that was passed on the following day by the House of Representatives and that has basic similarities to the Senate bill reported out by the Senate Finance Committee.

Among other points, the declaration said it "strongly opposes certain of the 'escape clause' proposals in that bill which would expand such provisions from a device to give warranted relief from import injury into a medium for widespread trade restrictions.

"An excessive loosening of the 'escape clause' could be severely damaging to U.S. interests," the statement said. The escape clause in trade legislation provides for limitations on imports under certain circumstances involving injury to domestic industries caused by excessive imports.

The convention expressed the hope that antidumping, countervailing duty and other trade laws already on the books, as well as voluntary trade agreements with other nations, would obviate the need for mandatory import quotas. Quotas, it was stated, should be appraised in terms of their impact on the whole U.S. economy, not just on any one industry.

Among other recommendations in the tax area, the convention endorsed an Administration proposal for a Domestic International Sales Corporation to provide export incentives.

In general, the NFTC urged the United States "to continue its leadership in the development and carrying out of policies for freer

TARGET AUDIENCE: U.S. WORLD TRADERS—*Federal agencies sent many speakers to the 57th National Foreign Trade Convention at New York's Waldorf-Astoria Hotel. In addition to Commerce Department speakers mentioned in story, others came from State, Treasury, Labor and Transportation Departments, the Eximbank, and the White House Office of Special Trade Representative, whose head, Ambassador Carl J. Gilbert, is shown at rostrum at the convention's opening session.*

international trade and investment on which the unprecedented world economic growth of the last 25 years has been based."

The policy statement, approved at the final general session of the Nov. 16-18 meeting in New York, called for protection of private property from expropriation abroad, more realistic taxation of foreign-source income, the orderly termination of mandatory controls on foreign investment, and a wide range of other anti-restraint steps.

Commerce Department's Assistant Secretary for Domestic and International Business Robert McLellan spoke of the interlocking interests currently among trade, investment, balance of payments, international exchange, international economic unity and, ultimately, political peace and stability.

"To consider trade policy today," he commented, "apart from the total system of man's international involvement—at least in the free world—is to deal with only a part of the real problem which is: how do we move the free world quickly to a high plateau of international economic and hence social unity."

This point was dramatized by former U.S. Ambassador to Japan Edwin O. Reischauer, who pointed to the need of maintaining good commercial relations between the U.S. and Japan so that in the larger context of worldwide political relationships the Japanese can assist the free world by becoming an effective bridge to the developing nations of Asia.

It was also reflected in the address of Canada's Minister of Industry, Trade and Commerce, Jean-Luc Pepin, who stressed the worldwide importance of continued U.S. expansionist policies. He said to the U.S. traders: "You need not be the only leader but, in view of your economic power, you must be one of them."

Among the other convention speakers were Deputy Assistant Secretary of Commerce Harold B. Scott, who reviewed Far East trade prospects, and Andrew E. Gibson, Assistant Secretary of Commerce for Maritime Affairs, who related new developments in revitalizing the U.S. merchant marine with foreign trade opportunities in the 1970's.

New Market Data Aids Exporters

For U.S. exporters, a fresh view of movements of manufactured goods worldwide is being offered by the Commerce Department in the first group of a revised series of Market Share Reports just published.

Market Share Reports, introduced in 1966 and updated each year since, provide information on imports of manufactured products by major trading nations over a 5-year period. They are issued by country and by commodity.

The first of the new series, now available, present data on 29 countries, 1965-69. The reports enable U.S. firms to compare their own export performance against major competitor nations in relation to the total import market for a particular product in each of these countries, and to project market prospects.

The new MSR's, covering 1,127 manufactured products, update tabulations previously issued for the same countries and are the first of 73 to be issued in the 1965-69 country series. Commodity reports also are being updated and are to be available early next year.

Each country report gives American businessmen the dollar values of the country's imports from the world, from the United States, and from eight other major trading countries, separately for each year from 1965 through 1969. The tabulations include total imports of all commodities, all manufactured goods, and groups of manufactures, such as chemicals, as well as imports of 380 subgroups (4-digit products) and 747 items (5-digit products) listed in the Standard

International Trade Classification, Revised (SITC). They also include the U.S. percentage shares of imports in each case.

The reports may be obtained at 75 cents each from Sales and Distribution, U.S. Department of Commerce, Washington, D.C. 20230.

The following list includes the identification (MSR) numbers to be used in ordering:

Australia, MSR 71-90003; Austria, MSR 71-90004; Belgium-Luxembourg, MSR 71-90005; Canada, MSR 71-90009; Denmark, MSR 71-90014; Finland, MSR 71-90019; France, MSR 71-90020; Federal Republic of Germany, MSR 71-90021; Greece, MSR 71-90023; Hong Kong, MSR 71-90026; Ireland, MSR 71-90030; Israel, MSR 71-90031; Italy, MSR 71-90032; Japan, MSR 71-90035; Republic of Korea, MSR 71-90037;

Libya, MSR 71-90041; Netherlands, MSR 71-90045; New Zealand, MSR 71-90046; Norway, MSR 71-90049; Portugal, MSR 71-90054; Singapore, MSR 71-90056; Spain, MSR 71-90058; Sweden, MSR 71-90059; Switzerland, MSR 71-90060; Taiwan, MSR 71-90061; Tunisia, MSR 71-90065; Turkey, MSR 71-90066; United Kingdom, MSR 71-90069; Yugoslavia, MSR 71-90072.

Latin Trade Group At Commerce Seminar

Trade authorities from six Latin American countries convened at the Commerce Department this month for a week-long international trade seminar originally proposed by Secretary of Commerce Maurice H. Stans during a Latin American tour last spring.

The group of 11 men and a woman, representing Argentina, Brazil, Colombia, Jamaica, Uruguay and Venezuela, studied trade promotion, marketing and financing in seminar sessions in Washington, New York and New Orleans under auspices of Commerce's Bureau of International Commerce.

U.S. Share Of Market For Manufactures Drops

The U.S. position in the world market for manufactures weakened in the second quarter of 1970 despite a substantial advance in sales. Rising by almost 3 percent, U.S. exports of manufactured goods reached a seasonally adjusted total of over $7.5 billion during the period. The combined shipments of the other major industrial countries expanded considerably faster, however, reducing the U.S. share of such exports to markets outside this country by nearly one percentage point to 21.4 percent.

Share losses widespread

This decline pulled down our market position in manufactures to its lowest point in at least a decade, with the exception of the first quarters of 1965 and 1969 when U.S. exports were badly disrupted by the longshoremen's strike at Atlantic and Gulf ports. Share losses were widespread, extending to all major product groups except transport equipment. The deterioration in our standing for the first six months of 1970, however, was less severe than it had been for the corresponding period a year earlier.

Following a downtrend of nearly 2 years' duration, the U.S. share of the world transport equipment market recovered significantly, as sales rose sharply after several quarters of virtual stagnation. The main thrust in the 13 percent export expansion came from a sharp increase in deliveries of cars to Canada. Contributing to the advance were the heavier shipments of automotive parts to Canadian plants of U.S. subsidiaries for the assembly of the new American subcompact cars, mostly for export to this country.

Declining exports substantially weakened our relative standing in the world chemical market. Our position fell back to its low, October-December 1969 mark of 22.2 percent, as the 1.6 percentage point loss in the U.S. share nullified the sharp gain of the first quarter of 1970. Reduced shipments of organic and inorganic compounds, which more than offset modest increases in resins and plastics and in medicinals and pharmaceutical products, accounted for the drop in overall sales.

The U.S. position as a supplier of machinery also deteriorated significantly. Our standing in the nonelectric machinery market suffered an especially sharp setback as U.S. exports grew at only one-fourth the rate by which our industrial competitors boosted shipments. Although deliveries of electronic computers and parts, metalworking machinery, and nonagricultural tractors and parts climbed significantly, falling sales of agricultural machinery and materials handling equipment and sluggishness in several other important products in this group severely limited the overall advance. U.S. shipments of electric machinery moved more rapidly, mainly on the strength of a sharp gain in exports of electric power machinery and switchgear and of transistors and other semiconductor devices, the bulk of which were destined for assembly by U.S. affiliates, mainly in the Far East. Nevertheless, the U.S. share declined to 22.6 percent, its lowest level in several years.

Despite the continued expansion in exports of steel-mill products (particularly to Western Europe), copper, and paper and paperboard, U.S. deliveries of "other manufactures," a heterogenous class of products comprising mostly semimanufactures and nondurable consumer goods, declined marginally during the June quarter. The reduc-

U.S. SHARE OF WORLD EXPORTS OF MANUFACTURES

Adjusted for seasonal variation

Commodity		U.S. exports (million dollars)	U.S. share (%, world exports to foreign markets[1])
Manufactures, total			
1967	1st qtr.	5,266	23.4
	2nd	5,192	22.6
	3rd	5,172	23.4
	4th	5,281	23.5
1968	1st	5,476	22.8
	2nd	5,863	24.4
	3rd	6,388	24.2
	4th	6,154	22.6
1969	1st	5,785	21.1
	2nd	6,879	23.1
	3rd	7,054	22.8
	4th	7,085	22.2
1970	1st	7,331	22.2
	2nd	7,545	21.4
Chemicals			
1967	1st qtr.	707	24.0
	2nd	698	23.5
	3rd	685	23.6
	4th	722	24.0
1968	1st	748	23.5
	2nd	810	25.1
	3rd	918	25.3
	4th	810	22.7
1969	1st	661	18.9
	2nd	917	23.8
	3rd	884	22.0
	4th	906	22.2
1970	1st	1,015	23.8
	2nd	984	22.2
Nonelectric machinery			
1967	1st qtr.	1,520	30.9
	2nd	1,485	29.7
	3rd	1,475	30.3
	4th	1,491	30.1
1968	1st	1,481	28.8
	2nd	1,558	30.6
	3rd	1,688	30.3
	4th	1,603	28.0
1969	1st	1,486	26.9
	2nd	1,834	29.3
	3rd	1,914	29.4
	4th	1,953	29.1
1970	1st	1,982	28.6
	2nd	2,011	27.4
Electric machinery			
1967	1st qtr.	528	25.9
	2nd	526	25.4
	3rd	526	26.1
	4th	525	25.8
1968	1st	537	24.7
	2nd	567	26.1
	3rd	600	25.3
	4th	581	24.0
1969	1st	590	24.0
	2nd	684	25.2
	3rd	720	25.1
	4th	686	23.3
1970	1st	719	23.4
	2nd	751	22.6
Transport equipment			
1967	1st qtr.	1,062	30.7
	2nd	1,092	30.4
	3rd	1,150	31.9
	4th	1,220	34.2
1968	1st	1,352	33.6
	2nd	1,436	35.0
	3rd	1,501	34.7
	4th	1,579	33.8
1969	1st	1,616	33.2
	2nd	1,676	33.1
	3rd	1,644	32.3
	4th	1,624	31.0
1970	1st	1,620	30.8
	2nd	1,837	31.4
Other manufactures			
1967	1st qtr.	1,449	15.9
	2nd	1,391	14.9
	3rd	1,336	15.3
	4th	1,323	14.9
1968	1st	1,358	14.3
	2nd	1,492	15.7
	3rd	1,681	16.0
	4th	1,581	14.6
1969	1st	1,432	12.9
	2nd	1,768	14.8
	3rd	1,892	15.3
	4th	1,916	14.8
1970	1st	1,995	14.7
	2nd	1,962	13.8

Note: The quarterly figures in 1969 were affected by the U.S. longshoremen's strike beginning Dec. 20, 1968 and ending Feb. 15 at New York and on various dates through Apr. 13, 1969 at other ports. The term "manufactures" refers to chemicals, machinery, transport equipment, and other manufactures except mineral fuel products, processed food, fats, oils, firearms of war and ammunition.

[1] World exports are defined as exports from the 14 major industrial countries. These nations, which account for approximately four-fifths of world exports of manufactures to foreign markets, are as follows: United States, Austria, Belgium-Luxembourg, Canada, Denmark, France, Federal Republic of Germany, Italy, Netherlands, Norway, Sweden, Switzerland, United Kingdom, and Japan. Exports to foreign markets are total exports excluding exports to the U.S.

tion stemmed primarily from reduced exports of instruments, photographic goods and related products, aluminum, clothing, and textiles. As a consequence of this loss in sales, the U.S. share of the other manufactures market fell to 13.8 percent.

Only Italy and France among our five main competitors increased their shares of manufactured exports to world markets excluding the United States during April-June 1970. Both countries made substantial gains, however, with France recapturing from Japan the status of fourth principal supplier. Germany and the United Kingdom held their market positions, while Japan sustained a marginal loss.

Continuing to recover from the effects of the labor problems that had plagued it, particularly in late 1969, Italy increased exports by one-eighth. In so doing, it raised its portion of the global market to 7.2 percent, equaling its 1969 quarterly average. The Italian position strengthened in all commodity groups, with the most marked advance in nonelectric machinery. France moved ahead in three groups while holding even in a fourth as it lifted its overall standing to 9.1 percent.

In retaining position on the world market for manufactures, Germany improved slightly on its average quarterly standing for 1969. It increased share marginally in other manufactures, the most important range of commodities among its exports, but slipped in chemicals and transport equipment, especially the latter. Even though the United Kingdom merely held its overall position, British exporters enhanced standing in two commodity groups.

Despite moderate slippage, the Japanese position in the manufactures market in April-June was higher than its average for 1969. Compared to the first quarter of 1970, however, Japan gave ground in every commodity group except other manufactures.

U.S. BUSINESSMEN IN BRAZIL—*Service industries mission was briefed in Sao Paulo (above) by U.S. Consulate General officials. Mission Director J. Richard Speicher is standing, fourth from left; in front of him, U.S. Consul General Robert F. Corrigan. In picture at right, Edward T. Dicker (right) shows burlap sack used in his construction process to prospective customer.*

Service Industries Mission Sees Markets In S. America

Capsule tips for executives of service industries looking toward South American markets:

In seeking franchise arrangements, the typical U.S. company finds it practial to look for a relatively heavy investor who can take on several outlets rather than for a small operator who might want to open just one unit . . . Venezuela offers immediate potential, as some U.S. companies have already popularized the franchising concept . . . Price competition there for car-washing equipment is not formidable . . . In Argentina, with its unusual beef consumption, a pizza restaurant would have to provide also a full line of beef products . . . In both Argentina and Brazil, financing is likely to be the key to equipment sales . . . Joint ventures with firms in nonrelated fields are well worth considering.

These and other marketing points are offered by a U.S. service industries trade mission just back from Caracas, Rio de Janeiro, Sao Paulo, and Buenos Aires.

The outlook differs somewhat from country to country, the mission members found, but the group returned with a high degree of optimism about future business—especially in Venezuela.

The five-firm mission—representing such service industries as fast-food restaurants, automatic car washes, low-cost construction techniques, and personnel placement—sought license agreements, joint ventures, franchising arrangements, and direct sales. In 13 days, the business executives interviewed more than 175 appointees in the cities visited. The company officials estimate more than $4 million worth of business in the next year resulting from their contacts. Of the contracts already signed, the most significant is a $3 million agreement negotiated in Caracas.

Cooperation cited

Mission Director J. Richard Speicher, who heads the Service Industries Division of the Commerce Department's Bureau of Domestic Commerce, attributes much of the mission's success to the publicity it was accorded by chambers of commerce, commercial and executive associations, investment counselors, bankers, and the press. "The job was to reach the ears of potential investors and this we accomplished," he said.

Speicher further explained that generally when a franchise company seeks business abroad it most often is looking for a rather large private investor, or group of investors, or a company seeking to diversify. "The objective is a multi-unit or territorial franchise agreement —someone to become a master franchisee in a foreign country who, in turn, becomes the franchisor in that nation, franchising the individual units."

He pointed out that joint ventures with companies currently in completely non-related fields are good possibilities. For example, he reported, officials of one of the fast-food companies on the mission are having discussions with a manufacturer in Venezuela.

For the most part, the mission members got the liveliest response in Venezuela. Fernando Halpern, Uniworld Franchise Development Corp., New York, described the three countries this way: Venezuela, where franchising has already been favorably received, offers the most immediate possibilities; Brazil, which requires additional market development efforts, will present problems having to do with payments of fees and royalties; the most substantial promo-

tional effort will be needed in Argentina, where the franchising concept is virtually unknown. Both Halpern and Larry Barnette, President, Allied Personnel Corp., Jacksonville, will be aggressively following up leads uncovered during the mission for their companies.

Eugene Bernardi, President, Bernardi Bros., Inc., Harrisburg, Pa., made several direct sales and lined up permanent distributors for his automatic car wash equipment. "We should be able to export to Venezuela without too much trouble from competition," he said. "Our prices seem to be in line with German and Italian equipment. . . . In both Brazil and Argentina the key to our success will be securing financing."

According to Kenneth Miller, Franchise Director, Pizza Hut, Inc., Wichita, Kan., the mission was highly successful for his company: "My goals on this mission were to determine the feasibility of beginning operations in each of the areas and to learn if there was an investor climate conducive to joint-venture expansion. The situation was found to be quite good, and we were able to establish the type and quality of potential investor that we look for."

Edward T. Dicker's low-cost construction technique was of keen interest. His company, Dicker Stack Sack International, Dallas, was the one successful in concluding with its licensee the $3 million contract in Caracas.

George Dietz, Vice President of the Export-Import Bank of the United States, accompanied the mission.

Specialized trade missions are organized by the Commerce Department, which pays operating costs and furnishes a director. Members pay their own expenses and do business for their own firms.

Two earlier service industries missions have gone abroad under the program—one to Japan in 1969, and one to Germany last spring.

Prospects Viewed In Oil, Textiles As Changes Loom

Rising U.S. demands for energy will inevitably be affected by continuing instabilities in world markets and world production centers, Secretary of Commerce Maurice H. Stans told the American Petroleum Institute this month.

Speaking as a member of the President's Oil Policy Committee, the Secretary said the U.S. petroleum industry "must recognize the constant prospect of uncertainty, unexpected developments and change in other parts of the world. In places where the supplies of petroleum are the greatest, so is the threat to those supplies."

He then suggested: "Considering those conditions, we must stimulate production at home to be able at all times and under any conditions to protect our national security. We will in time need a better and more lasting understanding with Canada on matters of energy policy. And as a further measure, we will certainly need to recognize always the importance of oil supplied from other parts of this hemisphere."

Analysis of textile future

Looking ahead at problems and prospects in another major U.S. industry — textiles — Commerce's Deputy Assistant Secretary for Resources Stanley Nehmer examined the probable effect on the industry of the import quota system proposed currently in Congress. He submitted an analysis to the National Association of Wool Manufacturers that countered one offered earlier by Governor Andrew F. Brimmer of the Federal Reserve Board, which foresaw a $1.8 billion loss to U.S. consumers in 1975 if the textile quotas are adopted.

Nehmer declared that, in the absence of import restraints, losses to the U.S. economy in lessening tax revenue from depleted wages, and the cost of import-relief adjustment assistance both to workers and to textile firms would have "an economic impact measurable in tens of billions of dollars."

He also said Brimmer had exaggerated the extent by which proposed quotas would restrict imports, overlooking flexible provisions in the trade legislation that cover non-disruptive exemptions and the openings for negotiated agreements. He further challenged Brimmer's price comparisons.

Three bases for judgment

Nehmer offered the following estimate of the effect on textiles of the trade bill provisions:

"First, we should recognize that textile and apparel imports will continue at high levels under the bill. Instead of the disruptive 47 percent growth in imports of man-made fiber textile products which occurred in the first nine months of this year over the same period of 1969, which was 25 percent higher than the 1968 level, which was 52 percent higher than the 1967 level, we should see a smaller and non-disruptive rate of growth in such imports.

"Second, our experience with regard to cotton textile imports which have been subject to control since 1961 under international agreements, has been that prices have risen only slightly. In 1960, the year before these arrangements began, the wholesale price index for cotton products (1957-59 = 100) stood at 104.4. In September 1970, it was at 106.4. During the same period the index for all industrial commodities increased from 101.3 to 117.1.

"Third, the key to the future of prices of textiles and apparel lies in maintaining a viable, competitive domestic industry, that is, in the competition of 30,000 firms for the consumer's business. If imports should further reduce the size of this industry significantly, we can all view with alarm the impact on the consumer."

Trade Fairs, Centers

Tokyo, Paris, London Will Host Major U.S. Exhibitions In Early '71

Japan's market for marine, shipbuilding and oceanographic equipment is one of the largest in the world. A leading shipbuilder, Japan launched 9.3 million gross tons in 1969, and ranked first in exports of ships. The Japanese marine and shipbuilding industry is expected to sustain its annual growth rate of 10 to 15 percent annually.

To assist American exporters of this equipment, an exhibition will be mounted at the U.S. Trade Center in Tokyo, Feb. 22-27.

Japan is a major importer of shipbuilding and marine equipment, purchasing $47 million worth of equipment in 1969, of which the U.S. share was $14 million or 30 percent. By the end of next year, the total marine and shipbuilding market in Japan is projected topping $900 million.

Demands for oceanographic equipment are expanding. Imports of this equipment rose from $3 million in 1967 to almost $9 million last year.

For additional information call Bill Dawson, 202-967-5286, or write the Department of Commerce, BIC-936, Washington, D.C. 20230. Details are also available from any Commerce Field Office.

Chemical processing

Investments to modernize and expand the French chemical industry, which may reach more than $4 billion by 1975, are sharply boosting demand for the newest in chemical processing equipment.

To help American manufacturers zero in on this fast-growing market, Commerce will sponsor an exhibition featuring a cross-section of American industry's latest chemical processing equipment at the French chemical trade fair CHIMIE, Apr. 19-25.

The chemicals industry is one of the strongest in the French economy. Output, estimated at nearly $7.9 billion in 1969, has almost tripled in the last decade, according to studies.

Total French imports of chemical processing equipment are currently about $78 million a year, with the U.S. share estimated at 40 percent, or $31 million.

Most of the French chemical plants are interested in testing and quality control systems rather than in individual instruments.

Write: U.S. Department of Commerce, BIC-948, Washington, D.C. 20230 (202-967-2434), or contact any Commerce Field Office.

Electronics equipment

The United States is the leading exporter of electronics equipment to the United Kingdom and will seek to maintain that position in the face of growing competition.

To assist U.S. manufacturers in this prime market, the Commerce Department will sponsor an exhibition of American-made electronic components and instrumentation at the 22nd biennial International London Electronic Components Show next May 18-21.

Spurring the need for electronic components and instrumentation in the U.K. are the expansive demands of the domestic consumer electronic market, increased production of data processing equipment, and increasing British electronic equipment exports to the rest of the world.

The market for electronic components in Britain is growing at approximately 12 percent a year, three times the average manufacturing industry growth. Deliveries of active and passive components in 1967 amounted to $475 million and rose to $578 million in 1968.

Manufacturers interested in the U.S. exhibition at the International London Electronic Components Show should contact the Department of Commerce, BIC-942, Washington, D.C. 20230 (202-967-3838), or any Commerce Field Office.

Fairs In Two Nations Seek U.S. Participants

Two international exhibitions in France and Ethiopia are now open to American exhibitors seeking to promote their products in overseas markets. The Commerce Department does not plan special promotions at these events.

The Exhibition and Symposium for Exploitation of the Oceans, OCEANEXPO '71, will be mounted in Bordeaux, France, Mar. 9-14. The promotion will be divided into six areas: exploration of the marine environment, marine trans-

LONDON ELECTRONICS SHOWS—*U.S. electronics equipment manufacturers joined in IEA last May (above), and will participate in another similar biennial electronics event in the U.K. in '71.*

NUTS & BOLTS SHOW—*Trays of Continental Screw's industrial fasteners cover a display table at an industrial equipment exhibition at the U.S. Trade Center in Paris.*

port and port development, exploitation of ocean resources, fishing and distribution of sea products, electronics in ocean sciences, and an exhibit of air cushion vehicles, equipment and hydrofoils. Write: OCEANEXPO, 8, rue de la Michodiere, 75-Paris-2.

A promotion emphasizing the importance of agriculture in Africa will coincide with the Sept. 1-10 meeting in Addis Ababa of the Association for the Advancement of Agricultural Sciences in Africa. Exhibits may include agricultural machinery, equipment, implements, hand tools and chemicals. Write: AAASA, Office of the Sec./Treas., P.O. Box 30087-M.A., Addis Ababa.

Industrial Assembly Display Draws Top Buyers To Paris

Industrial assembly equipment ranging from screws and automatic locks to welders and retaining rings were displayed by 26 American firms at the U.S. Trade Center in Paris, Oct. 19-23.

Orders for equipment totaling more than $2.3 million are being projected for the event which drew almost 1,000 trade visitors to its exhibits.

Exhibitors were seeking to fill 11 positions for overseas representatives when the show opened; by its conclusion, three had been contracted and negotiations with 10 other candidates were in progress.

COMPUTER '70 Is Top U.S. Show In Far East; Projects $41 Million

The most successful U.S.-sponsored promotion in the Far East—COMPUTER '70—closed in Tokyo Oct. 17 with its 54 participants projecting more than $41.5 million in sales over the 12-month period following the show and are estimating 24-month sales topping $53 million.

Representing 63 American manufacturers, the participants compiled over $2.2 million in book orders. The six-day all-U.S. event and its colloquium were attended by 19,878 trade representatives, many of whom waited three or more hours in line to see the American display.

During the show, each exhibitor received an average of 138 sales leads.

Several American firms were seeking overseas representatives at the show and three contracts were concluded by its end. Two agreements were under review and five other firms reported potential negotiations with 24 foreign concerns as a result of COMPUTER '70.

CROWDS JAM COMPUTER '70—*Almost 20,000 visitors registered at the all-U.S. COMPUTER '70—the most successful show Commerce has staged in Japan.*

Dutch Prospects For 1971 Keyed To Inflation Policies

A dock strike that began in Rotterdam in late August has set off a wage explosion throughout the Netherlands economy. As a result, states the U.S. Embassy in The Hague in a report to the Department of Commerce, much of the progress made earlier this year in controlling inflation has been wiped out.

Other highlights of the report include:

► The Government is proposing a tough program to control inflation.

► Output continues to increase substantially, but inflation is cutting profits and boosting imports.

► U.S. exporters have improved their share of the market, and prospects are good for 1971.

► U.S. investment continues at a high level, but new investors must expect some short-term obstacles next year.

In August shipbuilding workers walked out at one Rotterdam yard in protest over a long-standing grievance about higher wages paid temporary outside workers. In short order the nation's longshoremen and other shipbuilding and engineering workers followed suit.

As part of the settlement in the shipbuilding industry a f 400 ($112) bonus was granted. Echoes of this demand quickly reverberated around the country, and there were countless walkouts and short strikes. Most large employers, including the Government (where there was no strike) have now granted a similar bonus, plus its continuation as an f 8 ($2.24) per week increase in 1971.

Prior to the strike and wage explosion, the Netherlands appeared to have made some progress in controlling the price spiral. For the first six months of 1970 the cost of living rose only 3.2 percent. The wholesale price index was steady from May through July with prices for agricultural products tending to decline and those for industrial raw materials increasing, but manufactured goods remaining steady.

Throughout the first half, wage demands continued to escalate and, because of the severe labor shortage, especially in the west, met little resistance. The increases are attributable in part to the long-term "catching up" necessitated by the increasing integration within the EEC, relative to which the Netherlands was traditionally a low-price, low-wage country. A recent EEC report shows that from April 1964 through October 1969 hourly wages in industry increased 58 percent in the Netherlands, whereas the average for the community as a whole was only 46 percent.

In the short-term, the tremendous price increases in 1969, which effectively wiped out any appreciable rise in real disposable income, provided the principal impetus to wage demands. From October 1969 through July 1970 hourly wages rose by 10.5 percent and weekly wages by more than 9 percent.

Government fights inflation

The Government has proposed a number of special measures designed to stop inflation: roughly $140 million from the 1971 national budget will be frozen; wages, and income, corporate, sales (VAT), and gasoline excise taxes, and a special consumer's tax on automobiles, will be increased effective Jan. 1, 1971; consumer credit and government guarantees on loans for other than housing construction are to be restricted; investment in new industrial plant will be limited by a permit system and a surcharge; contingent upon agreement of the Social and Economic Council, there will be a temporary wage freeze; and present price controls will continue .

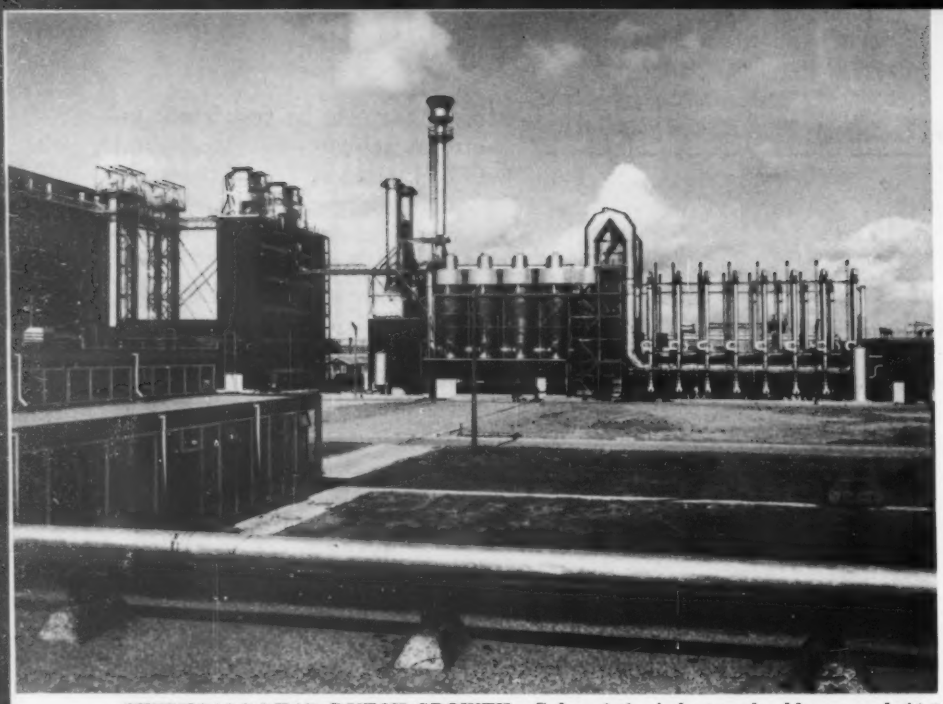
The government coalition has received majority support for the general program from the Parliament, but faces critical examination by the Social and Economic Council. This body is strictly advisory but because it brings labor, business and public representatives together in a unique form of cooperation, its support is a virtual necessity for so controversial an action as a wage freeze.

Since May the commercial banks have had to maintain non-interest bearing "penalty deposits" with the Central Bank because collectively they exceeded the latter's ceiling for expansion of short-term lending to the domestic private sector. This policy will continue into 1971 and will probably necessitate a formal system of credit rationing.

For its part the Government, which was widely criticized for inflationary financing by the manner in which it borrowed $250 million on the open market in 1970, expects to borrow less than half that amount in 1971, all by long-term means. From an estimated budget deficit on combined current and capital account of $799 million in 1970, the government deficit is estimated at $577 million in 1971. There is no immediate alternative to high-cost, inflationary financing by the municipalities however. One in three has a serious deficit, and in the longer term a reallocation of revenue will probably be necessary.

The scarcity of capital and an expected profits squeeze, at least in some sectors, will do nothing to discourage the accelerating pace of mergers. From 1963-1969, 1,700 firms were involved in 1,000 mergers within the Netherlands. In the first half of 1970 there were 350.

For the first six months of 1970



CHEMICALS LEAD DUTCH GROWTH—*Sales of the industry should approach $3.5 billion this year; U.S. firms are benefiting from the rapid expansion through profit repatriation and higher exports. Here, a view of a carbon black plant near Rotterdam.*

gross investment was 16 percent above the first half of 1969 and equaled $3.3 billion; the figures for the second half should be somewhat higher.

The growth in industrial production for 1970 will be lower than 1969 but will probably total at least 11 percent. Since expanding production is currently as much the result of strong domestic demand as of foreign demand, it will be adversely affected by the proposed restrictions on consumer credit, higher personal taxes and taxes relating to automobiles. Assuming adoption of the full deflationary program, including the doubtful wage freeze, private consumption is slated to rise 4.5 percent in 1971; in any case, the 1971 increase in production is expected to be less than 5 percent. Higher wages, corporate taxes and prices for raw materials add up to an intensified profit squeeze.

Of the "big four," first half 1970 figures showed a decrease in net profits for Royal Dutch Shell and AKZO, a small increase for Unilever (Dutch share) and a substantial increase (19 percent) only for Philips.

Industries with high rates of productivity increases and large export trade should be best able to withstand the anticipated slowdown. Of these the future of the chemical industry, whose sales should approach $3.5 billion in 1970, appears especially bright. By 1980 petroleum products and chemicals are expected to be the Netherlands' largest exports. A recent Central Plan Bureau forecast predicts an 80 percent growth in the chemical industry in the 5-year period through 1973.

In the East, natural gas fields are proving of significance. Natural gas accounted for 25 percent of total energy consumption in 1969. By 1975 its share may be 40 percent.

In 1970 Dutch imports from the United States should exceed $1.25 billion and maintain the position of the Netherlands as the highest per capita European consumer of U.S. goods. Inflation and full capacity conditions are likely to continue into the first few months of 1971. Thus, the general economic state of affairs offers good opportunities for American exporters.

The fiscally induced decrease in industrial construction may affect U.S. exports of machine tools and other industrial equipment, but probably not until later in the year. The drive to increase productivity through automation and labor-saving devices of every description should continue so long as labor is both scarce and expensive. The service industries are major participants in this trend.

Opportunities for exports of equipment to the major growth industries—chemicals, oil refining and metallurgy—are especially good. U.S. crude chemical products remain good prospects, and opportunities for the sale of pollution reduction equipment to the Netherlands should grow.

The interest in franchising continues to grow following an agreement between McDonalds (U.S. fast food shops) and the Dutch supermarket chain, Albert Heijn. Also, the Dutch Government has approved a project to establish motels and restaurants along the superhighways.

American investors continue to enter the Netherlands in consistently high numbers. New investors must expect some short-term obstacles in 1971: the labor market will be tight and somewhat unsettled; local financing will be difficult to obtain; the surtax on corporate profits will increase temporarily, probably by 5 percent; and there will be a system of licensing non-residential construction; and a temporary tax will be levied on the value of the contract for such construction. The subsidy for new investment will no longer apply to investments in Zeeland province (in the Southwest). These fiscal measures have not yet been fully outlined and are subject to revision prior to enactment by Parliament.

In the longer term the Netherlands retains its attractiveness as an intra-EEC location. Assuming successful completion of the negotiations for British, Irish, Norwegian and Danish membership in the EEC, it will be even more centrally situated.

Swiss Will Import More To Meet Rising Demand

A rising aggregate demand is sustaining the Swiss economic upswing, bringing increasing reliance on foreign suppliers and producing a record rate of imports. The U.S. Embassy in Bern has reported to the Department of Commerce that continued high levels of investment, particularly in construction; growing production; full employment; and price increases already approaching 5 percent point to an 8-9 percent increase in national product in 1970, but to a real growth rate of less than 4 percent.

Domestic production is unable to satisfy the increased requirements of domestic and foreign demand. Hence, the increasing reliance on imports, which continue to outpace exports, portends a record merchandise trade deficit which by September reached $1,027 million. Private consumption, which has been growing, still lags somewhat in comparison to total demand.

On the basis of first half figures, a 3.7 percent increase in real growth and an 8.6 percent rise in GNP at market prices are estimated for 1970. The high rate of imports and their price inflated value are expected to restrain any more significant real growth this year.

Industrial production is growing by 8 percent and is expected to increase further once current investments come into fruition. The rate of growth by sectors is relatively similar to last year, but with a 4 percent decrease in textiles. Increases are largest in gas and electricity, metal and paper, chemicals, and graphic arts. With industry operating at near full capacity, order backlogs remain high and average between 7 to 15 months. Longest backlogs are in the machinery sector—textile machinery, turbines, and advanced machine tools.

The rate of investment in construction, estimated at $4.33 billion in 1970 (U.S.$1.00=SF4.30), is an important component of gross capital formation and is feeding inflationary and demand pressures. As a contrast to more sluggish trends earlier last year, industrial construction is zooming ahead, with a slower rate of increase in residential housing; construction costs are increasing commensurately. A popular public demand for more lower cost housing may be expected to push investment higher.

Consumer prices edge up

Price increases, heretofore, have been notably in imports and wholesale prices. Consumer price increases are just beginning to make an impact as earlier rapid increases at the wholesale level are being overtaken at the retail level. Although over-all price increases in the range of 4 percent were expected for the whole of 1970, by the end of September the consumer price level had moved upwards by 4.9 percent and wholesale prices by 4.6 percent. An increase for the year of over 5 percent is now generally anticipated.

A tight labor market, stricter controls over foreign labor, and full employment have assisted in propelling the upward wage movement. The 4.5 percent increase in wage levels for the first six months follows retail and wholesale price behavior. Wage increases recently granted will be reflected in prices later this year and early next year. In addition, higher rents and a 10 percent increase in social security benefits contribute to the outlook for higher prices.

In dampening inflationary trends, the government's main reliance continues to be on monetary policy, through credit restrictions which have generally made money tighter.

Faced with a growing trade deficit, a controversial export deposit scheme appears to have been put in abeyance for the time being.

The recently announced 1971 budget proposes public expenditures at approximately $2 billion, slightly higher than 1970's $1.8 billion estimates.

The domestic demand for capital remains high and is reflected in trends in medium and long-term capital markets.

U.S. exports to Switzerland are climbing sharply. During the first six months of 1970, the U.S. share of the market increased to 9 percent in comparison with 8 percent for the like 1969 period. The value of imports from the United States rose by 45 percent for the same period, due to both quantity and price elements. Aircraft and parts were important components of U.S. sales.

The bulk of imports originate from the EEC area, with Germany the principal supplier. With respect to future trade, the Swiss, together with Austria and Sweden, are engaging in exploratory discussions with the EEC concerning some form of future association. Discussions are premised on arrangements yet to be worked out with the prospective EEC membership candidates.

Tightened controls over foreign labor, partially designed to reduce the total number of foreign labor and affecting both the production and services sectors, will undoubtedly be maintained for some time. Foreign and American firms based in Switzerland may have temporary difficulty in rotation of foreign management personnel.

The long range outlook for a tight labor market limits expansion capacity of producing firms and compels increased productivity through greater automation and rationalization. In the case of multi-national companies, installations in some instances can be and have

been shifted to units outside Switzerland, particularly when factor costs abroad may be cheaper.

Increasing Swiss concern over the environment and, in particular, over its lakes and rivers will have long range impact on industry. Of immediate interest is pollution abatement equipment, which will be featured at the Basel Pro Aqua-Pro Vita Fair June 8-12, 1971, in which the United States will officially participate. Sales opportunities are excellent for advanced U.S. equipment and instruments.

With a high per capita utilization of computer services, Switzerland offers marketing potential for electronic components and data processing equipment and accessories. The Industrial Electronics show at Basel March 9-13, 1971 will have medical electronics as its theme and should provide good opportunities for U.S. manufacturers.

Potential remains high

Sales potential for American products remains high in industrial controls and labor saving devices. Other sales categories of interest to U.S. suppliers include sophisticated instrumentation, advanced training aids, and novelty catering and institutional equipment. Demand remains high for consumer items such as toiletries, quality luxury foods, fashion apparel, and sporting goods and wear.

The changing situation in Switzerland should spur investment by Swiss private industry in the United States. Swiss direct investment abroad is estimated to date at $6 billion, of which approximately $2.4 billion is in the United States. Leading Swiss firms have been operating for a number of years on an international scale with production plants or licensees in all major countries. However, other large and medium-sized companies producing solely in Switzerland are beginning to feel the effects of production difficulties and labor shortages and might be receptive to opportunities in the U.S.

Thai Trends Point To Trade Deficit, Further Foreign Exchange Losses

The performance of the Thai economy in 1970 should compare rather favorably with recent years, although it seems unlikely to match the 9.4 percent rate of growth in real terms recorded in 1969. In a report to the Department of Commerce the U.S. Embassy in Bangkok notes that trends toward a large trade deficit and a continued loss of foreign exchange reserves dominate the scene. The 1969 trade deficit of $528 million may not be exceeded this year, but a very large deficit is expected.

High levels of imports to supply the expanding, developing economy will continue, and the total for 1970 will undoubtedly be larger than in 1969. In the last five years imports increased at the average rate of 13.7 percent, although in 1969 the increase had been only 11.5 percent. The rate of growth should be reduced somewhat further by the imposition of new tariff rates, primarily on luxury items, but the full impact won't be felt until more time has passed.

Exports grow more slowly

At the same time, earnings from exports can at best increase only modestly. Thailand's leading export, rice, will probably increase in volume, but almost certainly the earnings will decrease. For the first seven months of this year exports stood at 650,000 tons, 150,000 tons or 30 percent higher than in the same period last year. The total value of these exports has nevertheless decreased by 4 percent.

However, other primary products should be able to improve their contributions to Thailand's foreign exchange earnings. The star performer should be corn, which may replace rubber this year as the number two export. Exports may reach two million tons, with demand especially strong both in Japan and Taiwan.

Prospects for tapioca have never been brighter. Sales abroad, primarily in the pellet form, are running well ahead of last year, with first quarter performance 32 percent up in volume and 40 percent up in value. Exports may hit one million tons, while only 700,000 tons were exported in all of 1969.

Kenaf exports for the first seven months of the year were 7.3 percent above those for the same period in 1969 by volume, with prices at about the same level. The volume of tin exports has been running at about the same level as in 1969, while the prices have improved slightly. Rubber is less likely to improve its performance this year as the market has not been as strong as last year.

Other items in the balance of payments which are positive and normally grow at a good rate are not performing too well so far this year. Although tourist arrivals by air in the first six months increased by 35 percent over the same period in 1969, preliminary indications are that average spending is less. One likely explanation is that many tourists are on their way to or from EXPO 70, stay only a day or two, and tend to save their money for Japan.

Arrivals may also begin to fall off as the inaccessibility of Angkor Wat affects travel plans for larger numbers of people, although this trend may be counterbalanced by heavy traffic for the Sixth Asian Games in December. The continuing expansion of air services, on which the tourist trade depends, is contingent upon completion of improved facilities at Bangkok's Don Muang airport and on the Government's extension of traffic rights to foreign air lines.

In addition to a lagging services

sector, private capital inflow is not keeping pace with last year and the Government expects a reduced level for the year as a whole. Undoubtedly there are many factors influencing this, among them economic conditions and competing investment alternatives elsewhere. It is obvious that some foreign investors are awaiting legislation on stay permits for foreigners and other measures now under consideration by the Government before responding to the many opportunities offered by Thailand.

Taken together with the trade deficit, these various factors resulted in a drawdown in Thailand's foreign exchange holdings to $824 million as of the end of July, $93 million below July 1969. The $50 million decrease during the first seven months of 1970 (mainly in June and July) is almost exactly the amount of the drawdown for all of 1969 and foreshadows a considerably higher net loss of reserves for the full year.

Government took action

In mid-year the Government took two measures in the fiscal field designed to deal with the balance of trade problem. Tariffs were raised on about 200 items, business taxes were raised on many items from 5.5 percent to 7.7 percent with higher rates for certain "luxury items" such as cars, electrical appliances, photographic equipment and television sets, and excise taxes were increased on soft drinks and alcoholic beverages. Also, an "austere" budget was submitted to the National Assembly for FY 1971, beginning Oct. 1, of $1.38 billion which is only 5 percent above the budget for FY 1970, as compared to an average annual rate of growth of the budget from 1966 to 1970 of 14.4 percent.

Tariffs were increased mainly on consumer goods such as automobiles, processed foods, air conditioners, refrigerators, and electrical appliances. However, some raw materials and components required for processing and assembly in Thailand were also affected. Little additional revenue is expected from the higher tariffs, but it is hoped that the value of imports will be reduced by as much as $50 million per year. Nevertheless, the trend toward increased imports probably will not be reversed.

The new taxes should bring in about $40 million in additional revenue which will be applied to help reduce the budget deficit for FY 1971.

The immediate effect of these two measures was to cause a slow down in business activity. Prices have remained at about the same level, with the exception of the main imported items subject to the duty increase. This condition no doubt reflects uncertainty of consumers and businessmen as to what will happen next and their adoption of a wait and see attitude before making new decisions on purchases and orders.

Some domestic industries such as tires, cement, textiles and clothing will benefit from the tariff increases. However, others are protesting that their position has been eroded by the higher duties on their raw materials and component parts as well as by the multiple application of the higher business tax to purchases of materials and sales to customers.

Undoubtedly the most significant development for Thai-American trade has been the July tariff and tax increase. Even if the higher tariffs do not result in lower total imports in 1970 than in 1969, Thailand's rate of import growth is almost sure to drop off from the booming pace of the 60's. Beyond the short-term, however, dealers in most lines of American goods and equipment that were affected expect upper-income consumers to be back in the market once they adjust to higher price levels for most imports.

It is possible, therefore, that 1970 could be the first year in more than a decade in which U.S. sales to Thailand do not show an increase over the previous year. Imports in 1969, excluding all military and economic aid, reached an all-time high of $1.270 billion. The U.S. market share was $214 million or almost 17 percent. Thai commercial imports increased by 13 percent in 1969 over 1968, and U.S. sales rose almost correspondingly by 12 percent.

With a little more sales effort on the part of U.S. suppliers and agents Thailand should be a $200 million or more market for U.S. products in 1970. The economy and demand for imports remains basically strong, especially for capital equipment for new industries and for heavy equipment for construction. Sales possibilities for U.S. tobacco and cotton also remain bright.

In addition, even among the "luxury" categories on which significantly higher duties now apply, consumer preferences for many U.S. brands are well established and American suppliers can retain a top-line market share. Moreover, agri-business projects and equipment and supplies for Thailand's dominant agricultural sector generally offer good opportunities for expansion of American sales.

THAI UPTURN CONTINUES — *Continued construction activity is spurring demand for building equipment. Above, Telecommunications Center in Bangkok.*

Nigerians Showing New Confidence In Second Decade Of Independence

After five years of instability, Nigeria is returning to the task of economic development as it starts its second decade of independence. The military government, which has a largely civilian administration, has the country's support in its goal of rapid economic development within the framework of a market economy. Matters like inflation, a short-run shortage of foreign exchange, some labor unrest, and a keen sensitivity over questions relating to national sovereignty will linger as legacies of the recent civil war.

The shape and style of its military government, and tribalism are important issues which Nigerians still have to face, but the paramount question—Nigerian unity—seems firmly resolved and with a minimum of bitterness. There is no question but that Nigerians embark on their next decade with more confidence, more determination to avoid pitfalls of the past and a great deal more experience in management of their economy. That is the current situation in Africa's most populous nation, as reported to the Department of Commerce by the U.S. Embassy in Lagos. Further details of the Embassy's report follow.

The Government has announced a plan for postwar reconstruction and development; an outlay of $4.5 billion is projected for the years 1970-74 with over half to come from the private sector.

When the civil war ended in January, the three eastern states, plus part of another where the war was fought, faced shortages of food, housing and ready cash. Fortunately, war damage was relatively light. Overburdening of infrastructure and lack of maintenance have proved to be among the most costly damages of the recent war and pose a reconstruction problem common to most of the country.

A vital key to the activation of the economy in the East is the restoration of the money and banking system. For the most part this has been done, although the tangled problem of bank balances used during the war, when transactions were recorded in old Nigerian currency and in highly inflated rebel currency, has not yet been resolved.

The eastern part of the economy is coming alive again but it has not returned to its prewar tempo. It may not do so for a year. By then a new and improved electric power grid will be in service—but in the interim, many places have at best an intermittent supply of electricity, which has slowed the start of industrial and commercial activity.

Agricultural exports rose modestly during the first half of 1970. The petroleum companies are exporting a million and a quarter barrels of crude a day, over twice last year's average level.

Biggest import year

On the import side, 1970 seems certain to be the biggest year ever, surpassing 1965's three-quarters of a billion dollars worth of goods. Imports have increased by a third this year and should continue to come in at an ever increasing volume, including capital goods for new and expanding industries, supplies for post-war reconstruction, and consumer goods which have not been seen on store shelves since the beginning of the civil war. Now that the Government has adopted a policy of holding down the cost of living by permitting imports of some consumer goods in short supply and by encouraging the private sector to bring in capital goods to produce import substitutes, the import bill will become larger.

The increase in imports, while export earnings climb less quickly, means that Nigeria's foreign exchange reserve picture will not improve rapidly. This situation is likely to prevail for another year or two.

Despite this rather somber picture, the business community and government policy makers, while watching closely, seem little concerned. They note that while the size of the backlog has grown by almost a quarter in the past nine months, the amount of foreign exchange available to the private sector has increased half again over what it was this time last year. For a large share of those applying for foreign exchange, payment can normally be expected in four months or less and only rarely does payment take longer than six months. No one yet has failed to receive payment for an approved import.

Banks are more active

Commercial bankers, pressed by the Central Bank to encourage activity in the private sector, began to increase loan activities. As a result, the money supply began to climb and this spring had increased by almost a half over the previous twelve months.

Consumer prices have also climbed. The cost of living indexes in the larger Nigerian cities show increases of ten percent or more in the past year. The Government has tried to hold down these prices in several ways: import restrictions on many consumer goods have been relaxed; a price control system has been established; and programs have been launched to encourage farmers to raise more food crops.

Trends in the economy suggest that inflationary pressures will continue.

Business demand for new plant and equipment continued to be strong this year as Nigeria's fledgling industrial sector expanded rapidly. Imports of raw or semi-finished materials continue to climb. Perhaps as many as 300 industrial sites in the Lagos area are in some

stage of development as new industries are coming in or plant expansion is contemplated. Most of the wartime restrictions which encouraged import substitute industries remain in force. Furthermore, the re-integration of the war-affected areas into the whole Nigerian economy brought with it a demand that has yet to be satisfied.

As the private sector expands, an important auxiliary—a domestic capital market—is beginning to sprout again. Most well-established firms in Nigeria are drawing up plans to attract Nigerian investment; some half-dozen large firms plan to float public offerings in Nigeria's young, but well-structured stock market.

Construction activity has returned to prewar levels after a wartime slump. Contractors are counting on plans for new roads and new construction to push the level of construction activity up half again above prewar levels in the next year or two.

Agricultural production is expected to follow patterns of the last two years when good crops of most export commodities were produced.

Investors face higher costs

The inflationary trend which is developing will provide some difficulties for the many U.S. oil companies who are investing (their investment is already estimated to be over the half billion dollar mark) or will be pursuing active exploration and investment programs in Nigeria. It will mean that their "on shore" costs will be more expensive in an area where their operative budgets are already high as compared with the Middle East. New investors in other sectors may also need to revise their investment and operating budgets upward.

If the Government continues to pursue a policy of increased imports on a selective basis American exporters should find a bigger market in Nigeria. Goods and services to the petroleum sector will continue to be very high, and implementation of the development plan should trigger a demand for a wide variety of capital goods, including road building equipment to construct the highways Nigeria desperately needs and sophisticated building components for new public and private buildings. The market for communications equipment should be significant as telecommunications, while improving, are generally poor. The state-owned railroad and airline are already in the market for new equipment.

Although the emphasis will be on capital equipment, there is pent-up demand for consumer goods of all kinds. Petroleum revenues will grow but so will foreign exchange requirements for the implementation of the development plan.

The Nigerian Government welcomes foreign investors, but will be more selective in bringing in new industry. It wants Nigerian capital participation and firm assurances of training programs that will move Nigerians up the line into positions of real responsibility.

The investment climate was improved in October when the Government started machinery to allow foreign-owned companies to remit 40 percent of profits accumulated before the end of 1969.

BUSSES NOW LOADING FOR NIGERIA—*There'll be no passengers on this trip though. These Greyhounds are being shipped from Baltimore to a U.S.-backed bus line.*

Greyhound Joins Nigerians In Inter-city Bus Project

An inter-city bus transport system has been inaugurated in Nigeria under a joint-venture agreement between the Greyhound Corporation and several Nigerian operators who hold a majority interest in the company.

The new organization, Greyhound Luxury Travel of Nigeria Limited, was formed with the assistance of the Mid-America International Development Association of Chicago, an investment banking firm specializing in promoting U.S. investment in Africa. The U.S. portion of the investment is insured by AID against inconvertibility and expropriation.

Greyhound is contributing reconditioned busses, spare parts and maintenance equipment and management assistance to launch the new venture. Five air-conditioned busses arrived in Nigeria this summer and delivery of 15 more is expected shortly. Regularly scheduled passenger and express package routes, as well as charter service, will be instituted between the capital city, Lagos, and a gradually expanding number of the country's principal cities.

Government Policies Should Keep Brazilian Economy Buoyant In 1971

The Brazilian economy shows great vitality, with GDP expected to increase by about 7 percent in 1970. Moreover, current projections indicate that Brazil will be able to maintain a growth rate of 7-9 percent in 1971. In a report to the Department of Commerce, Randolph Reed, Assistant Commercial Attache at the U.S. Embassy in Rio de Janeiro, points out that political stability has contributed to this excellent performance, as have government policies of stimulating private investment and attracting savings to a small but growing capital market. Following is other information from the report.

Growth of the industrial sector during the first semester of 1970 equalled the impressive 9.9 percent registered during the same period of 1969. The composition of growth changed, however, with some of the industrial laggards of 1969 becoming among the more dynamic performers of 1970 and vice versa. The near-term outlook for industry is continued growth, at a rate of about 10 percent.

Brazil has enjoyed particular success in trade this year. Exports are expected to soar to $2.8 billion, an increase of 22 percent over 1969. Coffee, Brazil's principal export (approximately 35 percent of total exports), has benefited from high world prices, and exports of manufactured products (approximately 16 percent of total exports) have responded vigorously to government fiscal incentives, increasing an astonishing 86 percent during the first semester of 1970. Imports are projected at $2.5 billion, an increase of 9 percent over 1969.

If the projections prove correct, Brazil will have a favorable balance of trade of $300 million in 1970. In August 1970, Brazil's foreign exchange reserves reached an all-time high of $1.06 billion, approximately $590 million above the previous year.

Since 1967, the Brazilian Government has embarked on an import liberalization program aimed at reducing costs and increasing the productivity of Brazilian manufacturers. With foreign exchange reserves at a healthy level, various new import liberalization measures were implemented effective Sept. 1. The new regulations abolish import licenses; exempt imports of equipment, machinery, parts, and pieces needed for repair or maintenance and valued under $1,000 from import permit requirements; defer import permit requirements until after arrival on a limited range of imported products; and set a maximum time limit of four months for reviews to determine whether an imported product is a "similar" (i.e. like a local product and therefore subject to more severe customs treatment). If Brazil's balance of payments position continues strong, further import liberalization measures can be expected.

Major goals are listed

In a document entitled "Goals and Bases for Government Action" published in September, the Government summarizes the major investment and production goals for the period 1970-1973. The document lists about 230 specific projects planned by both the private and public sectors. Some of the main projections which will be of interest to U.S. suppliers include:

► Expenditures of $950 million for a major expansion of Brazil's steel industry.

► Development of two chemical industrial "poles" in Brazil, one located in Sao Paulo and the other in Bahia.

► New investment in mining of $906 million, with primary emphasis on raising iron ore production for export.

► Increased capacity of 54 percent in the electric power industry by 1973, calling for expenditures totaling $2.44 billion.

► Expenditures of $2.24 billion in the field of transportation, with approximately half being allotted to road construction.

U.S. A.I.D. project loan financing for Brazil will be in the range of $50-75 million for FY71 and will be concentrated in the areas of education, agriculture and private capital market development. Since procurement of equipment in the United States is no longer mandatory under U.S. loans, U.S. suppliers can no longer take this market for granted.

An encouraging development has been the substantial increase in Eximbank lending to Brazil. As of October, in CY 1970 Exim has authorized loans of $106 million and given financial guarantees for an additional $89 million in financing from other U.S. sources.

Both the IBRD and the Inter-American Development Bank are major sources of long-term financing for Brazil and will probably become more important as the United States channels more of its assistance to Brazil through these institutions. Local trade sources believe that the chances of U.S. firms winning these tenders would be greatly enhanced if they would submit a joint bid with a Brazilian firm.

The United States, with a 30 percent share of the Brazilian import market in 1969, is Brazil's leading supplier, far surpassing West Germany, which is second with 12.6 percent. The U.S. share, however, has been steadily declining from its high of 39.4 percent in 1966; we are losing ground to Europe (principally West Germany) and Japan. Brazil's imports from the United States in 1969 totaled $682 million, just below the $684 million attained in 1968.

The key to competing in the Brazilian market remains financing. In

an inflationary environment, in which short-term interest rates range between 25-40 percent per year in cruzeiro terms and medium and long-term financing is primarily available from the Government, credit is a major area of competition. European and Japanese suppliers are granting very generous financing terms and thereby increasing their share of exports in numerous areas.

With help from the Eximbank, U.S. suppliers should be able to improve their competitive position.

U.S. products enjoy a good reputation for quality, service, and parts and as a result are frequently competitive with lower-priced European and Japanese products.

Trend is favorable

Some U.S. products are reportedly too sophisticated for the present state of development of the Brazilian economy and thus are unable to compete with cheaper, less sophisticated products from other countries. While an inhibiting factor at this time, the increasing sophistication of the Brazilian market is a trend favorable to the United States. For example, the Brazilian market for printing and graphic equipment appears ready for more advanced types of equipment.

Brazil periodically concludes agreements whereby she exchanges coffee, cotton, cocoa, or rice for manufactured products. However, such barter deals are a very small proportion of Brazilian trade and do not constitute an important obstacle in this market.

The U.S. Department of Commerce will sponsor a Solo Exhibition in Sao Paulo toward the end of 1971. The exhibition is still in the preliminary planning stage and many details still have to be worked out. Product lines being considered because of their excellent potential in the Brazilian market are office efficiency equipment, graphics and printing machinery, and machine tools.

Seven U.S. Posts Review Key Economic Indicators

Following are brief indicators taken from Foreign Economic Trends recently received by the Department of Commerce from the U.S. Embassies in seven countries. Over 150 such reports for 117 foreign markets, ranging from 4 to 12 pages each, are received each year.

Annual subscriptions to the entire Foreign Economic Trends series may be obtained for $15 by writing to any Commerce Field Office or to Superintendent of Documents, Government Printing Office, Washington, D.C. 20402.

Angola's economy continues to expand. Agricultural exports are growing while mineral shipments have displaced coffee as the most important source of foreign exchange. Manufacturing output, although still small, is increasing at a healthy rate.

On the debit side, Angola's balance of payments deficit worsened in 1969, inflation persisted, and the counter-insurgency gobbled up $57 million of the Province's revenues.

Nevertheless, there appears to be a good chance that the balance of payments problem will become more manageable with the continued growth of mineral exports, the inflow of foreign investment and the expected implementation of a revised system for authorizing foreign exchange transfers. Angola's GNP grew by 11 percent in 1968, and current indications are that 1969 and 1970 will show continued brisk if somewhat slower rates of growth.

Portugal, along with the other EFTA countries, initiated exploratory talks with the Common Market this month. Although no timetable has been established, it is anticipated that Portugal eventually will achieve some type of formal association with the Common Market countries. Whatever the pattern of association, the result will be greater competition in the Portuguese market for U.S. exporters.

The boom in Portuguese imports this year has had favorable implications for the United States; for the first eight months of the year, Portuguese purchases from the United States were up 147 percent over the comparable period for 1969. While it is true that part of the increase can be attributed to one-time purchases, the short-term trend for most manufactures and for basic commodities is bright.

Uruguay has made consistent economic progress in 1970. Helped by 26 months of relative price stability, Uruguayan authorities are making foreign debt payments on schedule, have improved tax administration and collection, and are spurring exports to a rate unsurpassed in the last decade.

Increases in the standard of living and GDP are expected to virtually match the impressive performance of last year, and the awareness that increased imports are indispensable for a higher level of economic activity and a more efficient home industry provides an encouraging picture for foreign suppliers. A political factor, the influence which urban terrorism will have on foreign investment, domestic output and tourism, is a new element casting a shadow over the future.

Increased economic activity in **Paraguay,** which began during the last quarter of 1969, has continued during 1970. Higher world market prices for Paraguay's products, which spurred the upturn, plus con-

tinued foreign exchange earnings from tourism and cash inflows from foreign assistance should continue for the immediate future.

The improved situation should increase Paraguay's capacity for absorbing and utilizing external assistance. This, in turn, should make the country less susceptible to the vagaries of world market prices and further increase its ability to import.

The foreign investment climate in Paraguay is good. Infrastructure improvement, agriculture and tourism are the most promising areas for investment.

The **Moroccan** Government will give greater priority to industrial development in the future and will encourage industries producing for export. The Government believes that foreign investors will want to take advantage of the geographic proximity of the country to Europe, a low wage rate, and the free access granted to Moroccan industrial products by the EEC.

Among the major industrial investments being considered is a steel mill based on the iron ore deposits of the Rif mountains. The Government recently announced that it has agreed in principle to a proposal of the U.S. firm North American Utility Construction Co. for construction of a steel mill at Nador. In the meantime, construction is going ahead on an iron ore pelletization plant at Nador to improve the quality of the iron ore being mined.

Following **Uganda's** extraordinary overall economic growth in 1969, a slow-down is occurring this year, with real GDP likely to rise by no more than two percent. This is due almost entirely to a sharp fall in coffee output.

The rising cost of living is becoming a disturbing factor, as is a mounting government budget deficit. In addition, manufacturing has not been growing as rapidly as expected due to the small size of the domestic market and regional marketing problems. Also affecting the economy will be the departure of non-citizens as a result of the new Immigration and Trade Licensing Acts and other Ugandization measures.

Imports from the United States are on an upward trend this year, even though total imports into Uganda are down. In coming months, however, U.S. exports may grow more slowly as a result of a period of uncertainty in the economy.

Momentum of **Congo (Kinshasa)** over the last two years is pushing the economy to new highs in 1970. Indexes of output, exports and imports available so far this year signal another substantial rise in GDP, possibly on the order of the 7.5 percent average annual gain of the 1968-69 period.

With political, monetary and price stability achieved and with Congolese Government emphasis on attracting foreign investment, coupled with determination to devote greater resources to development projects, next year's economic outlook should be an excellent one, save for the uncertainty surrounding the price of copper—still the mainstay of the nation's economy.

Africa Nation Sees Hotel As Investor Wedge

An ultra-modern Madagascar Hilton Hotel, formally inaugurated in mid-October in the Malagasy Republic's picturesque capital city of Tananarive, is seen as a key venture to attract more tourists—and more private investment—to this vast island, the world's fourth largest, off the southeast coast of Africa.

The hotel, financed jointly by Israeli private interests and the Malagasy Government, has 200 rooms.

With Tananarive now able for the first time to offer the foreign visitor first-class accommodations, authorities are banking on being able to lure onto Madagascar foreign tourists and businessmen traveling in East and South Africa. Madagascar also is counting on its unique flora and fauna and its wild scenery to have it "discovered" by the tourist trade.

MALAGASY GETS A HILTON—*In addition to restaurants, a night club and meeting rooms, Tananarive's new hotel will offer a pool, bowling, and a casino.*

More important to the U.S. Businessman is the still untapped potential of the Malagasy economy, which needs and wants infusion of fresh capital and new ideas. The Government offers generous tax incentives and other advantages to attract foreign investors. American oil companies are currently prospecting in Madagascar and offshore. American cattle interests are planning to expand ranching and meat export operations.

The Malagasy Government wants new investment in industry, to supply both the domestic market as well as untapped markets in nearby Africa, the Middle East, as well as elsewhere in the Indian Ocean area. Moore McCormack Steamship Lines has direct sailings between U.S. East Coast ports and the main Malagasy port of Tamatave.

World Trade Actions

Technical Import, Credit Measures Are Reported

The Istituto Mobiliare Italiano (IMI) has announced the terms and conditions under which it will grant loans from a special $100 million fund to finance the importation of technologically-advanced scientific equipment which is not likely to be produced in **Italy.** The IMI is currently reviewing numerous loan applications and will begin disbursing funds soon.

Law 471/69, which established this fund, has the following provisions:

(a) The repayment period will be from a minimum of three years to a maximum of ten years, with a grace period of six months;

(b) The interest rate will be four percent for (1) borrowers in depressed areas and (2) institutions operating on a non-profit basis or concerned chiefly with scientific and technological research —a rate of six percent will be charged to all other borrowers;

(c) The loans will cover 100 percent of the cost of the imported instruments in cases where the borrower is from a depressed area or is a non-profit institute or institute concerned mainly with scientific and technological research. In all other cases, the loan will cover 70 percent of the cost of the imported instruments.

These loans offer an excellent opportunity for American manufacturers to expand their sales of scientific and other technologically advanced equipment in Italy.

The **Austrian** Trade Ministry has extended the validity of the antidumping ordinances against low-priced and market-disrupting imports of three categories. Effective Oct. 1, only the following items are subject to antidumping action: printed cotton fabrics (ex Tariff No. 55.09 B); flannels and zephirs of cotton (ex Tariff No. 55.09 B); and cardigans, pullovers and sets made of wool (ex Tariff No. 60.05 B 2). The minimum prices for imports of the antidumping measures remain in effect until Mar. 31.

Antidumping ordinances affecting the following commodities expired on Sept. 30: (a) plain woolen fabrics made of blended yarn; (b) certain cotton yarn, single, multiple or cabled; (c) pressed rubber boots; and (d) beechwood chairs. The Trade Ministry decided not to extend these antidumping actions upon recommendation of the Federal Chamber of Commerce, which felt that their import volume had dropped to a level where it no longer threatened disruptions of the domestic market. If within the next six months imports should rise again to undesirable amounts, the Chamber would request the reinstitution of barriers against low-priced foreign merchandise.

The National Credit Council, acting on the proposal of the Finance Ministry and the Bank of **France,** has ratified several important changes in French credit policy. These consist of the ending of overall quantitative restrictions on bank lending, coupled with some tightening of the several alternative devices used by the monetary authorities to control credit expansion. The combined thrust of the decisions is a prudent relaxation of the very stiff restraints on bank lending during the past two years as part of the French stabilization program.

The National Credit Council ratified the following specific measures:

- Abolition of the quantitative restrictions on bank lending;
- Reduction of rediscount ceilings.—Effective Nov. 3, rediscount ceilings at the Bank of France were reduced by 10 percent in the case of banks whose ceiling is 30 million francs or less and by 20 percent for those with a ceiling of more than 30 million francs. Thus, banks will have to find additional resources in the money market at somewhat higher rates than the normal discount rate.
- Tightening of conditions for rediscounting medium-term paper —henceforth, medium-term loans (i.e., up to 7 years) for housing construction and capital goods will be rediscountable at the normal discount rate only within one year from maturity. Loans within two years of maturity will be rediscountable at a rate 0.50 percent above the normal rate, i.e., at 7.5 percent.
- Modification of the system of mandatory reserves—a part of the reserve requirement will henceforth be calculated in function of credits extended by the banks to their customers, rather than of their deposit liabilities. The precise manner in which this new requirement will be applied will be announced later.

Germany has opened an import quota for canned pears in containers of less than 4.5 kg. from a number of countries, including the United States. Applicants for import licenses will be accepted from now until the value limit is reached but not later than Mar. 30, 1971. Products containing added sugar are subject to the respective European Economic Community regulations. For previous announcement see *International Commerce* of Sept. 29, 1969.

The **Greek** Ministry of Commerce has opened in New York the first of several trade centers it plans to establish in major cities throughout the world. The center, located at 150 East 58th St., has on display a wide range of Greek products, including foodstuffs, alcoholic beverages, knitwear, footwear and

handicraft items; items on display will be periodically rotated. The center will provide information on all Greek exports and help interested buyers contact Greek firms.

Six Nottingham Firms Denied U.S. Exports

Six firms in Nottingham, England, have been restricted from dealing in U.S. exports because of their close connection with a London firm against which similar restrictions were imposed in 1968.

According to the Commerce Department's Bureau of International Commerce (BIC), action was taken against the London firm B&Y (Gates) Electronic Developments Ltd. in 1968, prohibiting it from participating in U.S. export transactions because it failed to account for the disposition of strategic U.S.-origin electronic equipment.

Recently B&Y (Gates), as the parent company, formed the so-called Interby group of companies consisting of six firms, all located in Old Basford, Nottingham. The firms are Anthony Young Ltd., Fergie and Young Ltd., Northeast Walker Ltd., Northern Technical Services, Lanesra Associates, and Beeston Instruments (Engineering) Ltd.

To prevent evasion of the restrictions against the B&Y (Gates) firm, the restrictions were made applicable to the other six firms. The firms were informed of the proposed action and were given an opportunity to contest. They failed to do so.

Under this action the firms, their agents and employees are prohibited from participating in transactions involving commodities or technical data exported or to be exported from the United States. Without authorization from the Department of Commerce, no party may trade in commodities or technical data exported or to be exported from the U.S. with a party he knows is subject to such restrictions.

Liquidity Payment Balance Improves In Third Quarter

Preliminary third quarter data indicate a substantial improvement in the U.S. balance of payments on the liquidity basis. On the other hand, the official reserve transactions balance continued to show quite a large deficit.

The liquidity balance, seasonally-adjusted, was in deficit by $680 million, or $897 million excluding allocations of special drawing rights. This represented a favorable shift of $524 million from the comparable figure for the second quarter. The improvement was almost $1.3 billion after adjustment for a large swing in special financial transactions.

The balance on the official reserve transactions basis, seasonally adjusted, was in deficit by $1,847 million in the third quarter ($2,064 million excluding allocations of SDR). This was slightly larger ($86 million) than the second quarter deficit. Germany, where monetary conditions remained relatively tight for most of the quarter, had very large dollar gains, and several other European countries had small increases.

Surplus dips slightly

The trade surplus showed a small decline—$46 million—in the third quarter, but the largest identifiable shift was a $629 million swing in U.S. transactions in foreign securities. The latter was mostly due to sharply increased U.S. purchases of securities newly issued by Canada and World Bank. In the second quarter, new Canadian issues were very small and there were no Bank issues.

The third quarter merchandise trade surplus was $780 million, seasonally adjusted. That figure was not significantly different from the $825 million surplus in the second quarter, and represented the continuation of a substantial improvement over the $475 million average of the preceding two quarters. The small third quarter decline reflected a flattening of both exports and imports. The slight drop in exports—down $20 million to $10,680 million—followed strong gains in the preceding two quarters, while the small rise of $25 million in imports to $9,900 million continued the deceleration that began in the second quarter.

World Bank Group Aids Four Nations

Recent lending activity by the World Bank Group will provide more than $71 million to assist projects in four developing nations.

A World Bank loan of $13.8 million will help to finance the establishment of five Higher Technical Education Centers in **Greece,** marking the first phase of a long-term program to make the education system a more effective instrument for economic development.

Indonesia will receive $19 million from the International Development Association (IDA), a World Bank affiliate. An IDA credit of $4.6 million will be used mainly to construct and equip five technical training centers in major areas of industrial employment.

A World Bank loan of $36 million will assist in financing a telecommunications project in **Iran** which will more than double the number of telephone connections and greatly expand telex services. Improved telecommunications will benefit all sectors of economic activity—trade, commerce and government—and will help to achieve the Government's announced objective of decentralizing Iranian industry.

A credit of $2.5 million from the International Development Association (IDA) will assist **Nepal** in improving its highway system, a key element in the country's economic growth.

Worldwide Business Services

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors overseas. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine. The section that follows, incorporating the familiar Licensing and Investment Opportunities and Foreign Trade Opportunities, presents details about licensing and joint venture proposals, opportunities to sell foreign firms and government agencies, appoint agents, major construction and expansion projects, and visits by foreign buyers.

Licensing, Investment Abroad

0910, 2031—INDIA—Small manufacturer seeks financial and technical collaboration for a joint venture to establish an **integrated fishing center** at Mandapam, State of Tamil Nadu. The center would be the base for exploiting the seafood available in the Gulf of Mannar, the Palk Strait and in the Andaman and Nicobar island areas. Facilities would include deep-sea fishing trawlers, off-shore fishing boats, canning plant, cold storage facilities and a fishmeal plant. The annual catch is estimated at about 2,400 tons of prawns and 4,000 tons of fish; distribution would be for domestic and export markets. Write the Office of International Investment, Dept. of Commerce, BIC-878, Washington, D.C. 20230. WTD. P-70955

2010, 2030—SWITZERLAND — Producer of canned meats and related products seeks arrangements with **producers of ready-to-eat and semi-finished meat meals, canned meat specialties, meat sauces and pre-cooked products for fast preparation** in hotels, restaurants, snack bars, etc. Firm prepared to eventually import considerable quantities of pre-cut beef and beef carcasses. J. Kunz, Pres., Europa Fleish-Holding SA, 8865 Bilten/GL, Switzerland. P-70932

2270—ENGLAND—Floor covering manufacturer, experienced in woven plastic floor covering and injection molded plastic grass seeks licenses to make **new products in floor covering field.** Also **products for distribution through wholesale and retail hardware outlets.** Firm has modern plant, is capable of expansion; 90 employees; around $1.7 million annual sales. J. Mutch, Dir., W. Armes & Son Ltd., Chilton Mills, Sudbury, Suffolk. WTD. P-70928

2400 — BELGIUM — Medium-sized hardwood lumber company wants to diversify through joint venture. Seeks **new wood products or items in plastics or foam rubber field.** Interests include forest exploitation, furniture parts, packaging materials and machinery for lumber industry. Operates a saw mill, has land available for expansion. Victor Bernard, Deputy Consul General, Industrial Section, Belgian Consulate General, 50 Rockefeller Plaza, New York, N.Y. 10020. P-70926

2500, 3200, 3400 — SWITZERLAND — Firm specializing in bathroom accessories, wishes to make and market newly developed **shower enclosures, curtains and rods; cabinets; lights, mirrors; towel bars, etc.** Products should be novel and can include custom and do-it-yourself items. Anton A. Heuberger, Spirella, 8302 Kloton, Switzerland. WTD. P-70948

2600—ITALY—Licenses to manufacture **specialized paper products.** Interests include reprography paper, impregnated paperboard, continuous business forms and filter papers. Firm presently produces glassine and grease proof paper, corrugated cardboard and waxed paper. Antonio Vismara, Gen. Man., Cartiere di San Cesario, S.p.A., Piazza della Repubblica 32, Milan. WTD. P-70930

2890—AUSTRIA—Licenses to manufacture **chemicals for paper industry.** Market throughout Europe including East Europe countries. Firm produces paper sizings and rosins, protective agents and raw materials for paint industry. Operates several plants; maintains warehouses in principal Austrian cities. Employs about 140. Chemische Werke Franz V. Furtenbach, Ungargasse 5, A-2700 Weiner Neustadt, Austria. WTD. P-70953

3069—ENGLAND—Licenses to manufacture **packings and gaskets for engineering and industrial use.** Firm produces rubber, braided, metallic and compressed asbestos fiber packings. Has 15 branches in U.K.; employs about 500; established 1876. E. S. Walker, Dir., The Beldam Packing & Rubber Co., Ltd., Pilot Works, Windmill Rd., Brentford, Middlesex. WTD. P-70929

3400 — GERMANY — License sought to make such special electronic supply items as **chassis, magazines, carrier racks and frames for the location of plug-in and socket controls used for electronic appliances and data processing.** German firm wants to expand its manufacturing line of fabricated steel-sheet boxes and cabinets for electronic use. Joint venture would be considered. Firm employs 400; has subsidiaries in five other countries; established in 1929. Diagrams of items for which manufacturing licenses are sought are on loan from the Office of International Investment, Dept. of Commerce, BIC-878, Washington, D.C. 20230. Bran & Luebbe, Muehlenkamp 59, 2000 Hamburg 39. WTD. P-70949

3440—AUSTRIA—Steel organization interested in cooperating with firms manufacturing **products from steel plate, steel sheet and steel castings** to assist such companies in establishing themselves in Austria. Site selection, procurement of land or plants, advice on local business and commercial conditions and financial assistance, if desired, are among the services offered. Write Commercial Attache, U.S. Embassy, Embassy Bldg. X, VIII, Schmidgasse 14, Vienna. WTD. P-70951

3490—ENGLAND—Firm wishes to produce and market under license building industry components or products complementary to present line of **pipefittings, traps, valves and stopcocks.** Existing fa-

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) manual.

Background information on opportunities abroad and also assistance on overseas investments are available from the Office of International Investment, U.S. Department of Commerce, BIC-878, Washington, D.C. 20230. "P" numbers should be used when responding to specific proposals.

For additional information on opportunities to manufacture foreign firms' products in the U.S., write Commerce's Office of International Investment, BIC-874, referring to the applicable file number assigned each opportuhity.

WTD indicates that a World Trade Directory Report containing financial and background information on the foreign firm is available for $2 from the Department of Commerce, BIC-924, Washington, D.C. 20230, or from any Commerce Field Office.

cilities and capabilities include gunmetal foundry, hat brass stamping, machining, and testing. Existing sales and stocklist network distribute the firm present line of plumbing and pipe fitting products. The firm, Kay & Co. (Engineers) Ltd., is a wholly owned subsidiary of Alenco Ltd. D. H. Tolson, Alenco Ltd., The Grove, Slough, Buckinghamshire. WTD. P-70931

3550—CANADA—Licenses to manufacture **special purpose machinery for the processing industries, including chemical, pulp and paper. Also mining and metallurgical equipment.** Firm produces custom engineered industrial cranes, small railroad cars, hydraulic machinery. John A. Forlong, Crane & Special Products Div., Hammant Car & Engineering Ltd., 205 Vaughan Rd., Suite 23 S., Toronto 10, Ontario. WTD. P-70925

3560—THE NETHERLANDS—Licenses to manufacture **industrial gas cleaning and dust collecting systems; sulfur dioxide absorption systems; and scrubbing systems.** Also, **filters for air conditioning, clean rooms and ventilation; complete white room equipment; catalytic afterburners; and air pollution measuring devices.** SF Lucht-en Warmtetechniek N.V. 7 Natriumweg, P.O. Box 192, Amersfoort. WTD. P-70927

3589—ITALY—Licenses to produce industrial **water discharge treatment systems and water purification equipment.** Established 1968; firm manufactures commercial laundry equipment. Has new plant. Firm's surveys indicated developing domestic market for water purification systems. CEF-Costruzioni Elettromeccaniche S.p.A., 34 Via Fratelli Rosselli, I 40050-Funo di Argelato (Bologna), Italy. WTD. P-70954

7011, 6552—MEXICO—State of Sonora seeks financial, technical and managerial collaboration for the development of **motels, tourist related facilities and housing** for retired citizens. Various subsidies and incentives including tax exemptions for up to seven years are available to investors. Joint ventures with Mexican private capital as well as 100% U.S. investment will be considered. Armand Cantu, Gen. Mgr., State of Sonora Tourist Development, Blvd. Abelardo L. Rodriguez y Zacatecas, Edificio SOFIA, Desp. No. 1, Hermosillo, Sonora. Copies of a description of the State of Sonora's tourist plans and data on the economy is available from the Office of International Investment, Dept. of Commerce, BIC-878, Washington, D.C. 20230. P-70950

Booklet Describes Industrial Protection Rights In E. Europe

Firms contemplating licensing their processes or techniques to government entities in Eastern Europe may find interest in the publication *Licensing in Eastern Europe*, issued by the London-based East European Trade Council. The four-page booklet describes the nature of protection available in Eastern Europe for the industrial property rights of Western enterprises.

The Council will give advice and information on this subject to United Kingdom subsidiaries of U.S. firms, but is not prepared to provide such services to U.S. parent firms and other U.S. companies.

The booklet is available at no charge from the East European Trade Council, 6 Dean Farrar St., London S. W. 1.

U.S. Investments Up $5.8 Billion In 1969

The value of U.S. direct investments abroad increased by $5.8 billion in 1969, reaching a book value of $70.8 billion. While capital outflows at $3.1 billion were marginally below 1968, reinvested earnings increased to $2.5 billion, and valuation adjustments were $200 million, according to the Office of Business Economics monthly *Survey of Current Business*.

The impact on the balance of payments of the net flow of funds—the outflow for direct investment, and all other identifiable corporate flows— was favorable in 1969 by $5.6 billion, slightly more than in 1968. Borrowing abroad by corporations amounted to almost $2 billion, including $1 billion of new Eurobond issues and only a small part of the proceeds were left on deposit abroad. Earnings were up sharply to over $8 billion; fees and royalties totaled about $1.4 billion.

The developed countries accounted for $4.2 billion, or 73 percent, of the $5.8 billion growth. U.S. investment in Canadian affiliates increased by $1.5 billion, while investment in the European Economic Community increased by $1.2 billion. Investments in less developed countries rose over $1.2 billion last year. Direct investment in the unallocated international category—primarily shipping companies—rose $300 million in 1969.

U.S. ownership in foreign manufacturing affiliates increased $3 billion during 1969, to $30 billion. The developed countries accounted for $2.6 billion of the 1969 increase, with Western Europe receiving about $1.4 billion. The value of manufacturing enterprises in the less-developed countries increased by only $500 million in 1969, with the bulk of the rise going to Latin America.

Investment in petroleum affiliates amounted to $20 billion at the end of 1969, up $1.1 billion from 1968.

As a result of the continuing climb in earnings, the rate of return on all U.S. foreign direct investments rose to 13 percent in 1969, higher than any other year in the 1960's. With the rise in the rate of return on manufacturing investments abroad to 12.8 percent in 1969, the rate of return of 12.6 percent on comparable domestic investments (both exclude petroleum) was exceeded for the first time since 1963.

Income from direct investments amounted to $5.6 billion in 1969, an increase of over 13 percent from 1968. Developed countries accounted for $90 million of the total increase in income and less developed countries $325 million.

The *Survey of Current Business* is available from field offices of the Department of Commerce, or from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, at an annual subscription price of $9, including weekly supplements; single copies, $1.

Toulouse Offers Investment Potential To U.S. Companies

American firms contemplating investing in France may be interested in investigating the potential of the Toulouse region. This area is developing as a scientific center and is particularly interested in attracting U.S. electronics companies.

A committee of local businessmen has been formed to assist potential investors. Contact Alfred Mardegan, Salon Aeronautique et Spatial de Toulouse, 6 rue Deville, 31 Toulouse.

AMA Sets Seminar Dates

Two three-day seminars are scheduled by the American Management Association at the AMA's New York headquarters in December. "Effective Utilization of the U.S. Foreign Tax Credit" will open Dec. 14 and will cover ways to avoid double taxation, how to claim credit and what taxes qualify for credit. "Problems of Cost Allocation and Pricing Between Domestic and International Operations" begins Dec. 16.

Write: American Management Assn., AMA Bldg., 135 W. 50th St., New York, N.Y. 10020 (212-586-8100).

Licensing In U.S.

2813—SWITZERLAND — Non-chemical pest control of rodents, particularly rats and mice, and other pests in closed, commercial, foodstuff storage facilities. **File 1957**

3494—GERMANY — Thermostatic and thermodynamic steam **traps,** including traps for extreme capacities, stage nozzle and float traps, automatic drain **valves,** non-return valves, gravity circulation checks, sight-glasses, strainers, automatic boiler blowdown systems, regulating valves, sludge ejectors for steam boilers, return-flow temperature limiting valves, steam and water mixing valves, entrained oil detectors, and heat and process engineering control stations. **File 1958**

3541—GERMANY—Polishing, grinding and cutting machines for metal; also polishing cloths, polishing papers, and diamond cutting machines. Company specializes in laboratory and research institute equipment. **File 1959**

3545—SWITZERLAND — Solid tungsten carbide hob made entirely from high quality carbide. Reported to be first of its kind in the world. It is designed especially for manufacture of gears between DP 7-25, and has operating speed about four times faster than that of conventional HSS hobs. The company has also developed a device which can sharpen a 12 flute carbide hob in about 45 minutes. The company is interested in potential U.S. licensee with personnel qualified in gear technology. Negotiations with leading European manufacturers in this field are under way. **File 1960**

3551 — GERMANY — Machinery for **forming, sealing and labeling cartons; and fish processing machinery. File 1961**

3585—GERMANY—An invention which makes use of special **doors for commercial refrigeration units,** and **rail and roller guide assemblies** designed to facilitate accessibility of evaporators and other components for purposes of maintenance and repair. U.S. patent pending. **File 1962**

Foreign Trade Opportunities

These trade opportunities are based on reports received from the U.S. Foreign Service by the International Liaison and Trade Opportunities Staff and other units of the Bureau of Domestic Commerce (BDC), U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms are interested are indicated by the five-digit numbers and commodity classifications which are from the Standard Industrial Classification (SIC) Manual and the Numerical List of Manufactured Products, 1967 Census of Manufacturers used extensively by Government and industry.

U.S. firms should also be aware that the listing in *Commerce Today* of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Export Administration Act of 1969. Applicable export licensing regulations must be followed.

Every effort is made to include only firms or individuals with good reputations. However, the Department cannot be responsible for any trade relations.

The mark (•) indicates that this trade opportunity is a request for bids by a foreign government agency. A (★) at the end means that additional information may be borrowed by U.S. firms from the individual division of BDC. To avoid delays, requests for loan material should specify the country, commodity and foreign government agency.

WTD indicates that a World Trade Directory Report containing financial and business background information on the foreign firm is available for $2 from the U.S. Department of Commerce, BIC-924, Washington, D.C. 20230 or from any Commerce Field Office.

Agencies

Specific foreign firms have expressed interest in agency agreements for the products listed below. Exclusive agencies for these products are wanted only if specified.

Dairy products

20221 — SWEDEN — Cheese, mozzarella. Hermansson Restaurant AB (importer, restaurants on franchising basis), 8 C Torsgatan, S-752 22 Uppsala. WTD 10/70.

Canning, preserving foods

20331—GERMANY—Canned fruits. Correspondence requested in German. Kuehlhallen und Eisfabrik Dr. Karl Lieblich & Co. KG. (storage facility), 42-50 Krailenshaldenstrasse, D-7000 Stuttgart 30, Baden-Wuerttemberg. WTD 9/70.

20332—GERMANY—Canned vegetables. Correspondence requested in German. Kuehlhallen und Eisfabrik Dr. Karl Lieblich & Co. KG. (storage facility), 42-50 Krailenshaldenstrasse, D-7000 Stuttgart 30, Baden-Wuerttemberg. WTD 9/70.

20336—SWEDEN—Pizza sauces, frozen. Hermansson Restaurant AB (importer, restaurants on franchising basis), 8 C Torsgatan, S-752 22 Uppsala. WTD 10/70.

20372—GERMANY—Frozen vegetables. Correspondence requested in German. Kuehlhallen und Eisfabrik Dr. Karl Lieblich & Co. KG. (storage facility), 42-50 Krailenshaldenstrasse, D-7000 Stuttgart 30, Baden-Wuerttemberg, WTD 9/70.

20373 — GERMANY — Frozen prepared foods. Correspondence requested in German. Kuehlhallen und Eisfabrik Dr. Karl Lieblich & Co. KG. (storage facility), 42-50 Krailenshaldenstrasse, D-7000 Stuttgart 30, Baden-Wuerttemberg. WTD 9/70.

20373 — SWEDEN — Frozen pizza pies. Hermansson Restaurant AB (importer, restaurants on franchising basis), 8 C Torsgatan, S-752 22 Uppsala. WTD 10/70.

Broad woven fabric mills, cotton

22110 — LEBANON — Cotton fabrics. Shaker Hallak & Sons (importer, agept), Maktaby & Bank Zalkha Bldg., Allenby St., P.O. Box 3100, Beirut. WTD 11/70.

Broad woven fabric mills, manmade fiber, silk

22210 — LEBANON — Synthetic fabrics. Shaker Hallak & Sons (importer, agent), Maktaby & Bank Zalkha Bldg., Allenby St., P.O. Box 3100, Beirut. WTD 11/70.

22212—VIET-NAM—Tropical weight fabrics for men, women's clothing; finished textiles suitable for drapes, curtains. K. A. J. Chotirmall & Cie. (importer, dist., agent), 34-36 Phan Boi Chau, Saigon. WTD 11/70.

22212—VIET-NAM—Tropical weight fabrics for men, women's clothing; finished textiles suitable for drapes, curtains. Comptoir Indien (importer, dist., agent), 142 Le Thanh Ton, Saigon. WTD in prep.

22218 — AUSTRALIA—Terylene fabrics suitable for making window curtains. Sanderson & Cork (importer, dist., agent), Commerce House, 328 Flinders St., Melbourne 3000. WTD 10/69.

Broad woven fabric mills, wool

22310—LEBANON—Wool fabrics. Shaker Hallak & Sons (importer, agent), Maktaby & Bank Zalkha Bldg., Allenby St., P.O. Box 3100, Beirut. WTD 11/70.

Floor covering mills, products

22720—SWITZERLAND—Tufted, printed wall-to-wall carpets, all kinds. Rolf Bumbach AG; Attn: Mr. Bumbach (dist., agent), Hardstrasse 9, P.O. Box 8040 Zurich. WTD in prep.

Textile goods

22992 — AUSTRALIA — Printed linen furnishing fabrics. Sanderson & Cork (importer, dist., agent), Commerce House, 328 Flinders St., Melbourne 3000. WTD 10/69.

Men's coats

23100—Men's cotton coats, 7,200 in large sizes. Available for export not for sale because purchased as foreign surplus property of U.S. Government. Now held in bond on West Coast by J. M. Siegel, 465 E. Third St., Los Angeles, Calif. 90013.

Paper mills, products

26211—ISRAEL—Newsprint. Agency for Israel, Cyprus. G. & G. Foreign Trade Co. Ltd. (importer, agent, exporter), Shalom Tower, 9 Ahad Ha'am St., (P.O. Box 29239), Tel Aviv. WTD 7/69.

Converted paper products

26472—ISRAEL—Facial, cleansing tissues, toilet paper, etc. Agency for Israel, Cyprus. G. & G. Foreign Trade Co. Ltd. (importer, agent, exporter), Shalom Tower, 9 Ahad Ha'am St., (P.O. Box 29239), Tel Aviv. WTD 7/69.

Industrial chemicals

28160—ITALY—Oxides for manufacture of enamels for ceramic industry. Rey di Gavioli Rag. Gastone (importer, agent, exporter), 40 Corso Cavour, I 41100-Modena. WTD 11/70.

28181—TAIWAN—Dye intermediates, etc. Lynnbros Industrial Co., Ltd. (importer, agent), 7, Lane 118, Chien Kou North Rd., Taipei. WTD 9/70.

28199—TAIWAN—Other inorganic chemicals. Lynnbros Industrial Co., Ltd. (importer, agent), 7, Lane 118, Chien Kou North Rd., Taipei. WTD 9/70.

Synthetic materials

28220 — ISRAEL — Polyisoprene to replace natural rubber. M. Dothan Ltd. (importer, dist., agent), P.O. Box 1995, Tel Aviv. WTD in prep.

28230—LEBANON—Cellulosic manmade fibers. Shaker Hallak & Sons (importer, agent), Maktaby & Bank Zalkha Bldg., Allenby St., P.O. Box 3100, Beirut. WTD 11/70.

Drugs

28332—SOUTH AFRICA—Medicinal, botanical drugs. Scruple Ethical Products (Pty.) Ltd. (importer, agent), P.O. Box 61486, Marshalltown, Johannesburg. Attn: M. C. Dijon. WTD 9/70.

28332—TAIWAN—Veterinary products, other organic, inorganic medicinal chemicals for veterinary, human use. Lynnbros Industrial Co., Ltd. (importer, agent), 7, Lane 118, Chien Kou North Rd., Taipei. WTD 9/70.

Paints, varnishes, lacquers, enamels

28511—ZAMBIA—Paints, varnishes, lacquers, enamels. S.K. Mulenga, Man. Dir. (importer, dist., agent), Tools & Hardware Ltd., P.O. Box 2609, Kitwe. WTD in prep.

Agricultural chemicals

28790 — TAIWAN — Insecticides, fungicides, etc. Lynnbros Industrial Co., Ltd. (importer, agent), 7, Lane 118, Chien Kou North Rd., Taipei. WTD 9/70.

Chemical products

28911 — GERMANY — Synthetic rosin-free paper sizes. Sueddeutsches Emulsionswerk Wuest & Kost (mfr., exporter), 46 Rhenaniastrasse, 68 Mannheim 24. WTD 10/70.

Steel mill products

33123 — PAKISTAN — Electrolytic tinplate—bright finish with 0.25, 0.50 or 0.75 lbs. quoting per base box—base weight 100 lbs. in accordance with U.S. Federal specifications QQ-T-425 Temper. T-3, steel type MR schedule B-No. 674-7030. Requests quotations c. & f., Karachi. AK Corp. Ltd. (agent), P.O. Box No. 7421, Karachi 3. WTD 10/69.

Cutlery, hand tools, general hardware

34233—ZAMBIA—Files, rasps, spades, forks, etc. S. K. Mulenga, Man. Dir. (importer, dist., agent), Tools & Hardware Ltd., P.O. Box 2609, Kitwe. WTD in prep.

34291—NETHERLANDS—Marine hardware, other marine, yachting products. Representations for Western Europe requested, especially Netherlands, Switzerland. Erco N.V. (importer, dist., agent), Vliegheiweg 27a, Huizen (N.H.). WTD 10/70.

34295 — SWITZERLAND — Plastic hose fittings, couplings, clamps, for electric conduits. Elektrotechnik AG (importer, dist., agent), Leimbachstrasse 52, 8041 Zurich. WTD 10/70.

Plumbing fixtures

34320—FINLAND—Novel plumbing fixture fittings and trim (brass goods), for kitchens, bathrooms, water closets such as single control faucets, etc. Firm interested in licensed manufacture or distributorship. Ammus-Sytytin Oy John Lindgren, Technical Mgr. (importer, dist., mfr.), Rauma. WTD 11/70.

Metal stampings

34611—TAIWAN—Roll-bond evaporator plates for refrigerators. Lynnbros Industrial Co., Ltd. (imp., agent), 7, Lane 118, Chien Kou North Rd., Taipei. WTD 9/70.

Fabricated metal products

34940 — SWITZERLAND — Nipples for lubrication purposes in industry. Ernst Hausammann & Co. AG; Attn: Mr. Hausammann (dist., agent), Uetlibergstrasse 15, 8045 Zurich. WTD 10/70.

35192—VIET-NAM—Diesel engines. Thai Binh Duong Cong Ty (importer, dist., agent), 147 Trinh Minh The, Saigon. WTD 8/70.

Farm machinery

35227—ZAMBIA—Lawnmowers. S. K. Mulenga, Man. Dir. (importer, dist., agent), Tools & Hardware Ltd., P.O. Box 2609, Kitwe. WTD in prep.

Construction, mining, materials handling machinery, equipment

35351 — VENEZUELA — Conveyors systems; overhead trolleys; conveyors portable; conveyors tube system, pneumatic. Correspondence requested in Spanish. Bameca C.A. (importer, agent), Quinta Ingrid, Avda Tamanaco, Urb El Llanito, Caracas. WTD in prep.

Metalworking machinery

35410—ISRAEL—Machine tools for machining steel, iron; including parts. Exclusive agency. IKOMIN Ltd. (importer, dist., agent), 18/15 Zwi Graetz St. (P.O. Box 11097) Tel Aviv. WTD in prep.

Special industry machinery

35521—PAKISTAN—Textile machinery, cotton and woolen; spinning and weaving machines, preparatory, back process, finishing machines. Requests catalogs, quotations, C. & F., Karachi. Trans World Traders (Regd.) (agent), Rm. C20/A, C20/1, 021, Shikarpuri Cloth Market, Near Merewethere Tower, Bunder Road, Karachi-2. WTD 3/69.

35550 — NETHERLANDS — Machinery for graphic industry, all kinds. Exclusive agency. Van Randwijk's Grafische Machinehandel N.V. Attn: L. M. Brillemans, Mgr. (importer, dist.), 74 Dubbeldamseweg, or P.O. Box 107, Dordrecht. WTD 10/70.

General industrial machinery

35612 — SWITZERLAND — Vacuum pumps. Ernst Hausammann & Co. AG; Attn: Mr. Hausammann (dist., agent), Uetlibergstrasse 15, 8045 Zurich. WTD 10/70.

35612—VIET-NAM—Small pumps, gasoline or diesel powered. K. A. J. Chotirmall & Cie. (importer, dist., agent), 34-36 Phan Boi Chau, Saigon. WTD 11/70.

35614—SWITZERLAND—Air compressors for general industrial use. Ernst Hausammann & Co. AG; Attn: Mr. Hausammann (dist., agent), Uetlibergstrasse 15, 8045 Zurich. WTD 10/70.

35690—AUSTRIA—Device for sealing plastic straps used in packaging, baling operations; maximum weight of handheld applicator 5 lbs.; maximum sealing length 2". Finished seal must not be weaker than strap. Devices based on ultrasonic principle preferred. Hermann Zaruba Verpackung (importer, dist., mfr.), Gniglerstrasse 63 A, A-5020 Salzburg. WTD 3/69.

35690—SWITZERLAND—Labeling machinery, devices, tape dispensers, packaging, wrapping equipment used in shipping rooms. Requests replies from U.S. exporters of genuine novelty and quality products only. Emballeur Karl Weber AG (dist., agent), Austrasse 15, 8045 Zurich. WTD 10/70.

35690—SWITZERLAND—Central lubrication systems for application with industrial machinery. Ernst Hausammann & Co. AG; Attn: Mr. Hausammann (dist. agent), Uetlibergstrasse 15, 8045 Zurich. WTD 10/70.

Office, computing, accounting machines

35720—SWITZERLAND—Portable and office typewriters, manual and electric. Casar Muggli (importer, agent, retailer), Linteschergasse 15, 8023 Zurich. WTD in prep.

35740 — SWITZERLAND — Office calculating machines, small accounting machines, electronic desk calculators. Casar Muggli (importer, agent, retailer), Linteschergasse 15, 8023 Zurich. WTD in prep.

35791—SWITZERLAND—Genuine novelty office machinery, such as addressing, dictating, collating, sorting, mailing machines, except duplicators and computers. Casar Muggli (importer, agent, retailer), Linteschergasse 15, 8023 Zurich. WTD in prep.

Service industry machines

35852 — THAILAND — Air-conditioners, room, from 9,000-24,000 BTU. Exclusive agency. Requests catalogs, brochures, c.i.f. Bangkok prices. Kang Yong Co., Ltd., Attn: Praphad Phodhivorakhun, Man. Dir. (importer, dist.), 1113-5 Phaholyothin Rd., P.O. Box 4-103, Bangkok. WTD in prep.

35853 — SWITZERLAND—Commercial refrigeration equipment, all kinds, sectional coolers, self-contained units, reach-in refrigerators, display cases, self-service consoles, beverage coolers and dispensers, including control equipment, accessories. Universal AG (importer, dist., mfr.), Attn: W. Knoepfli, Hofackerstrasse 13, 8032-Zurich. WTD 1/70.

35857 — THAILAND — Air conditioners, auto, and packaged types. Exclusive agency. Request catalogs, brochures, c.i.f. Bangkok prices. Kang Yong Co., Ltd., Attn: Praphad Phodhivorakhun, Man. Dir. (importer, dist.), 1113-5 Phaholyothin Rd., P.O. Box 4-103, Bangkok. WTD in prep.

35891—SWEDEN—Pizza ovens. Hermansson Restaurant AB (importer, restaurants on franchising basis), 8 C Torsgatan, S-752 22 Uppsala. WTD 10/70.

35860 — SWITZERLAND—Grease guns of all kinds, especially for industrial applications. Ernst Hausammann & Co. AG; Attn: Mr. Hausammann (dist., agent), Uetlibergstrasse 15, 8045 Zurich. WTD 10/70.

Machinery

35992—SWITZERLAND — Flexible metallic hose for electric connectors. Elektrotechnik AG (importer, dist., agent), Leimbachstrasse 52, 8041 Zurich. WTD 10/70.

Electric transmission, distribution equipment

36120 — ISRAEL — Transformers, high voltage. Exclusive agency. IKOMIN Ltd. (importer, dist., agent), 18/15 Zwi Graetz St. (P.O. Box 11097), Tel Aviv. WTD in prep.

36132—NEW ZEALAND—Circuit breakers: 3-phase 11,000 v. automatic reclosing circuit breakers having breaking capacities of 200, or alternatively 400 amps, fault rating of around 100 MVA at 11

KV. Automatic reclosure may be by solenoid or by falling weight. B. R. Homersham Ltd. (dist., mfr.), 126 Victoria St., P.O. Box 280, Christchurch. WTD 8/70.

Electrical industrial apparatus

36215—VIET-NAM—Generators 50 KVA. Thai Binh Duong Cong Ty (importer, dist., agent), 147 Trinh Minh The, Saigon. WTD 8/70.

36216—VIET-NAM—Small diesel generators. K.A.J. Chotirmall & Cie. (importer, dist., agent), 34-36 Phan Boi Chau, Saigon. WTD 11/70.

36291—ISRAEL—Capacitors for industrial use, related equipment. Exclusive agency. IKOMIN Ltd. (importer, dist., agent), 18/15 Zwi Graetz St. (P.O. Box 11097), Tel Aviv. WTD in prep.

Household appliances

36344—VIET-NAM—Electrical household appliances. Comptoir Indien (importer, dist., agent), 142 Le Thanh Ton, Saigon. WTD in prep.

36344—VIET-NAM—Electrical household appliances. K. A. J. Chotirmall & Cie. (importer, dist., agent), 34-36 Phan Boi Chau, Saigon. WTD 11/70.

Electric lighting, wiring equipment

36410—THAILAND—Fluorescent lamps for greenhouses. Requests catalogs, brochures, c.i.f. Bangkok prices. Bhan Thavee Co., Ltd., Attn: Somchai Sutikulphanit (importer, dist.), 120/27-28 Rajaprarop Rd., P.O. Box 119, Bangkok. WTD in prep.

36430—SWITZERLAND—Electric wire, cable connectors, series-cable connectors, receptacles, cable assemblies, lamp sockets E 27 and E 14 US/CSA standards. Elektrotechnik AG (importer, dist., agent), Leimbachstrasse 52, 8041 Zurich. WTD 10/70.

Communication equipment

36620 — SWITZERLAND — CO_2 lasers, accessories. Cryophysics SA; Attn: K. Geiger (dist., agent), 39, rue Rothschild, 1202 Geneva. WTD 10/70.

36625 — NETHERLANDS—Echo sounders, similar marine, yachting equipment. Representations requested for Western Europe, especially Netherlands, Switzerland. Erco N.V. (importer, dist., agent), Vliegheiweg 27a, Huizen (N.H.). WTD 10/70.

Ship building, repairing

37321—HONDURAS—One MK-1V 40 ft. utility boat for use by Honduran Coast Guard. Terminales de Cortes, S.A. (agent), Apartado 298, San Pedro Sula. WTD in prep.

Engineering, laboratory, scientific, research instruments

38112 — SPAIN — Laboratory, scientific instruments. Jose L. Jimenez de Frutos (agent), Alamo, 5, Madrid (8). WTD 10/70.

38112—SWITZERLAND—Scientific instruments for application in chemical, medical, physical, general industrial laboratories. Instrumenten Gesellschaft AG; Attn: Mr. Witzthum, Pres. (dist., agent), Turbinenstrasse 31a, 8005 Zurich. WTD 10/70.

Optical instruments, lenses

38310 — SWITZERLAND—Accessories, apparatus for electro-optics research. Cryophysics SA; Attn: K. Geiger (dist., agent), 39, rue Rothschild, 1202 Geneva. WTD 10/70.

Surgical, medical instruments

38410—SOUTH AFRICA—All types of surgical, medical instruments. Scruple Ethical Products (Pty.) Ltd. (importer, agent), P.O. Box 61486, Marshalltown, Johannesburg, Attn: M. C. Dijon. WTD 9/70.

Photographic equipment, supplies

38612 — SWITZERLAND—Office photocopying equipment. Casar Muggli (importer, agent, retailer), Linteschergasse 15, 8023 Zurich. WTD in prep.

38612—TAIWAN—Auto-space phototypesetter, color separation control equipment. Lien's Brother Trading Co., Ltd. (importer, agent), 5, Lane 79, Taiyuen Rd., Taipei. WTD 10/70.

38615—TAIWAN—Graphic arts materials. Lien's Brother Trading Co., Ltd. (importer, agent), 5, Lane 79, Taiyuen Rd., Taipei. WTD 10/70.

Pens, pencils, office materials

39530—SWITZERLAND—Shipping room supplies, stencils, markers. Requests replies from U.S. exporters of genuine novelty and quality products only. Emballeur Karl Weber AG (dist., agent), Austrasse 15, 8045 Zurich. WTD 10/70.

Direct Sales

Specific foreign firms have expressed interest in direct purchases of the products below. See also the "Agencies" listing.

Field crop farms

01130—NETHERLANDS — Grains, raw materials for animal feeds industry. Direct purchase &/or agency. Internationale Graanhandel Thegra N.V. Attn: L.H.V. Theeuwes, Mgr. (importer, dist./exporter, mfr.), 147 Hoofdstraat, Rijen, N.B. WTD 10/70.

01190—NETHERLANDS—Raw materials for animal feeds industry. Direct purchase &/or agency. Internationale Graanhandel Thegra N.V. Attn: L.H.V. Theeuwes, Mgr. (importer, dist./exporter, mfr.), 147 Hoofdstraat, Rijen, N.B. WTD 10/70.

Fruit, tree nut, vegetable farms

01220—NETHERLANDS — Copra, raw materials for animal feeds industry. Direct purchase &/or agency. Internationale Graanhandel Thegra N.V. Attn: L.H.V. Theeuwes, Mgr. (importer, dist./exporter, mfr.), 147 Hoofdstraat, Rijen, N.B. WTD 10/70.

01220—ZAMBIA — Kataba grape vines. Jaffco Ltd., (Nurseries) (importer, dist., agent), Tenzebantu Rd., P.O. Box 2160. Lusaka. WTD in prep.

Canning, preserving foods

20334 — SPAIN — Canned fruit juices, nectars, concentrates. Antonio Vigo de los Rios (importer, dist.), Los Guanches 3 (Barrio Nuevo), La Laguna, Tenerife. WTD 10/70.

20354 — SPAIN — Mayonnaise, salad dressings, sandwich spreads. Antonio Vigo de los Rios (importer, dist.), Los Guanches 3 (Barrio Nuevo), La Laguna, Tenerife. WTD 10/70.

20361—SPAIN—Frozen packaged fish, other seafood, including soup. Antonio Vigo de los Rios (importer, dist.), Los Guanches 3 (Barrio Nuevo), La Laguna, Tenerife. WTD 10/70.

Floor covering mills, products

22710—ITALY — Manmade fiber woven carpets (moquette). Rey di Gavioli Rag. Gastone (importer, agent, exporter), 40 Corso Cavour, I 41100—Modena. WTD 11/70.

Textile goods

22950 — GERMANY — Plastic or plastic coated ground cloth for camping tents. IMPORTEX Handelsgesellschaft mbH & Co. KG (importer), 35 Stresemannstrasse, P.O. Box 1469, 28 Bremen 1. WTD 10/70.

Fabricated textile products

23940—GERMANY — Awnings, canopies, storm flaps for camping tents. IMPORTEX Handelsgesellschaft mbH & Co. KG (importer), 35 Stresemannstrasse, P.O. Box 1469, 28 Bremen 1. WTD 10/70.

23963—GERMANY—Gift tieing ribbon. Prices registered c.i.f. European ports. Direct purchase & agency. PECOTEX, A. Petzhold & Co. (importer, dist., agent, exporter), 6 York Strasse, Postfach 120350, 563 Remscheid. WTD 10/70.

23963—PORTUGAL—Gift tieing ribbons. Direct purchase & agency. Alfredo Aires Alves de SA (importer, dist., agent), Rua da Constituicao, 52, Oporto, WTD in prep.

Converted paper, paperboard products

26413 — PORTUGAL — Industrial tapes. Direct purchase & agency. Gomes de Castro & Irmao, Lda. (importer, dist., agent), Rua de Santos Pousada, 842, Oporto. WTD 10/69.

Books

27316—GERMANY—Books: art, theater, film, photography. Koenig, Walther, Buchhandlung (retailer), 93 Breitestrasse, 5 Koeln 1. WTD 11/70.

Industrial chemicals

● **28100—CEYLON**—Sulfuric acid, 4,000 Imp. gal., for storage batteries. Acid should be colorless. Tenders or manufacturers should supply a certificate guaranteeing the acid conforms to BS.S 3031 of 1958. Failure to supply this will cause the offer to be rejected. The H_2SO_4 content by weight of the acid shall not be less than 93.2%; the specific gravity of the acid corrected to 26.70°C (80°F) shall be 1.828 minimum. The acid shall be supplied in 5 gal. straight sided carboys, or for the supply of acid in polythene containers. A suitable device should be provided for easy handling. A drawing of the container should be forwarded with tender. First instalment of 2,000 gal. due in December, and the balance in two equal instalments due in May and October 1971. Bid deadline Dec. 16. The Chairman, Tender Board Ceylon

Transport Board, 200 Kirula Road, Colombo 5, Ceylon. Chemicals Div., BDC-665, Dept. of Commerce, Washington, D.C. 20230 ★(202-967-3468). Review copy available at the Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif. 94102 (415-556-5868).

28180—FINLAND — Industrial organic chemicals including plasticizers. Bang & Co. Oy, Aulis Tinnila (importer, dist., agent), Chemical Dept., P.O. Box 10079, Helsinki 10. WTD 3/70.

28190—CYPRUS — Chemicals for treatment of wines, spirits. Quote c.i.f. Cyprus. Direct purchase & agency. Aristotelis & Zenios (Arizen) Ltd (importer, dist., mfr.), Galileos St., P.O. Box 65, Limassol. WTD 10/70.

Drugs

28312—THAILAND—Serums for dogs, swine: cholera, distemper, hepatitis, leptospira. Requests catalogs, c.i.f. Bangkok prices. Ruam Thong R.O.P. (importer, dist.), 47 Kasemsan 2, Rama I Rd., Bangkok. WTD in prep.

28330—FRANCE—Medicinal chemicals, botanical products. Societe de Produits Chimiques Industriels "S.P.C.I." (dist., mfr., agent), 43 rue Cristino Garcia, 93-La Plaine-saint-Denis. WTD 8/70.

Paints, varnishes, lacquers, enamels

28516—ITALY—Protection paints, including anti-rusting paints for building industry, other industrial uses. Rey di Gavioli Rag. Gastone (importer, agent, exporter), 40 Corso Cavour, I 41100-Modena. WTD 11/70.

Chemical products

● 28900—BURMA—Ink, quick drying or powder, for printing on cement bags using rubber stamps; black 500 kgs.; red 500 kgs.; packed in 4 gal. cans or equivalent weight container. Tender No. 1(T) IRM-CM(70-71)E; bid deadline Dec. 31. Chairman, Cement Mills, Industrial Development Corp., Thayetmo ★(202-967-3512). Review copy available at the Commerce Field Office, 11444 Federal Office Bldg., 450 Golden Gate Ave., San Francisco, Calif. 94102 (415-556-5868).

28993 — GERMANY — Water repellents for insulation of camping tents. IMPORTEX Handelsgesellschaft mbH & Co. KG (importer), 35 Stresemannstrasse, P.O. Box 1469, 28 Bremen 1. WTD 10/70.

28993—ITALY—Water proofing, water repellent, rust resisting compounds. Rey di Gavioli Rag. Gastone (importer, agent, exporter), 40 Corso Cavour, I 41100-Modena. WTD 11/70.

28993 — PORTUGAL — Vitrifying compounds to be used in coating of water heater tanks. Electra Portuguesa, Lda. (importer, dist., mfr.), 592 Rua de Sa da Bandeira, Oporto. WTD in prep.

Petroleum refining

● 29100 — BURMA — Supply 1,000 long tons of 85-100 grade bitumen; 6,000 long tons of 60-70 grade bitumen; 1,000 long tons of 40-50 grade bitumen; and 1,000 long tons of SS-K grade cationic emulsified asphalt. Tender number 1/Q/BITUMEN/RGN-CORP/70-71; bid deadline Dec. 15. Purchaser: Secretary, Rangoon Municipal Corp., Maha Bandoola St., Rangoon. Copies of tender and specifications available from Dept. of Commerce, BDC-645, Washington, D.C. 20230 ★(202-967-5289) and the Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif. 94102 (415-556-5868).

● 29100—CEYLON — Ceylon Petroleum Corp. requests bids to supply various types of industrial and automotive greases in different types of containers for 1971. Quantity approximately 1,380,000 pounds. Tender No. 5199/70; bid deadline 10 a.m. December 15. Bid documents from the Chairman, Tender Board, Ceylon Petroleum Corp., 113 Galle Rd., Colombo 3. Specifications available from Petroleum & Coal Div., BDC-673, Dept. of Commerce, Washington, D.C. 20230 ★ (202-967-2355).

Tires, tubes

● 30100—BURMA—Bids requested for 16,881 sets in various sizes of tires, tubes and flaps. Tender No. 8026-1(T)TTS/RTB(70-71); bids due Dec. 21 by 4 p.m. to the Chairman, Road Transport Board, 375 Bogyoke Aung San St., Rangoon. Tenders available on loan from the Chemicals Div., BDC, U.S. Department of Commerce, Washington, D.C. 20230 ★(202-967-3381). Review copy available at the Commerce Field Office, 11444 Federal Office Bldg., 450 Golden Gate Ave., San Francisco, Calif. 94102 (415-556-5868).

Plastic products

30790—GERMANY—Windows and plastic screens for camping tents; guy ropes for camping tents. IMPORTEX Handelsgesellschaft mbH & Co. KG (importer), 35 Stresemannstrasse, P.O. Box 1469, 28 Bremen 1. WTD 10/70.

30790—SWITZERLAND—Plastic items for veterinary use, especially for artificial insemination, similar purposes. A. Eisenhut; Attn: Mr. Reich (dist., agent), Hegenheimerstr. 22/24, 4000 Basel 9. WTD 9/70.

30796—ITALY—Plastics flooring. Rey di Gavioli Rag. Gastone (importer, agent, exporter), 40 Corso Cavour, I 41100-Modena. WTD 11/70.

30797 — NETHERLANDS — Disposable plastics dinnerware, tableware, kitchenware, such as one-way-cups. Van den Heuvel Papier-Plastic (importer, dist.), 30-34 Nevadadreef (P.O. Box 9010), Utrecht. WTD 11/70.

Flat glass

32113—FRANCE — Non-breakable plastic (clear or opaque) window-like material for use in prisons and houses of correction. Correspondence requested in French. Ministere de la Justice, 52 Blvd. Raspail, Paris 6. M. Robert Chetrit, Dir. of Procurement & Technical Services.

Concrete, gypsum products

● 32700—CEYLON—Supply of 25,000 long tons of rock gypsum suitable for the manufacture of Portland cement. Should be crushed and supplied in particles of a maximum size of 3" and a minimum size of ½". Not less than 92.5% calcium sulphate dihydrate ($CaSO_4 \cdot 2H_2O$). Bid deadline Dec. 15. Purchaser is The Ceylon Cement Corp., Independence Square, P.O. Box 1382, Colombo 7. Copies of tender documents are available from the Dept. of Commerce, BDC-645, Washington, D.C. 20230 ★ (202-967-5289), and the Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif. 94102 (415-556-5868).

Steel mill products

● 33100—BURMA—129,000 ft. g.i. pipes of medium thickness with standard pipe threads and couplings according to B.S. 1387 or equivalent, in lengths of ± 20 ft. Tender No. 2/Q/GIP/RGN-CORP/70-71; bid deadline Dec. 15. Rangoon Municipal Corp., Rangoon. Copies of tender documents available from Iron & Steel Div., BDC-669, Dept. of Commerce, Washington, D.C. 20230 ★ (202-967-4412).

● 33100—INDIA—Supply of steel balls of various dimensions for inspecting welded and non welded steel pipes. Tender No. NK/MP/06(699)70; bid deadline Dec. 15. Hindustan Aeronautics Ltd., Maharashtra. Copies of tender documents available from Iron & Steel Div., BDC-669, Dept. of Commerce, Washington, D.C. 20230 ★ (202-967-4412).

● 33100—IRAN—274,000 kgs. chequered (ribbed) and black iron sheets of various sizes. Tender No. 1654/49; bid deadline Jan. 11. Iranian State Railways. Copies of tender documents available from Iranian Economic Mission, 5530 Wisconsin Ave., NW., Washington, D.C. 20015.

● 33100—SINGAPORE — 18 inch outer diameter seamless and submerged arc welded steel pipes for fuel oil and marine diesel oil. Tender No. S/19/028; bid deadline Jan. 5. The Port of Singapore Authority, Singapore. Copies of tender documents may be purchased from The Secretary, The Port of Singapore Authority, P.O. Box 300, Singapore.

● 33100 — YUGOSLAVIA — Supply of rails, points and track fastenings for the T. Uzice-Gostun and Gostun-Titograd Sections of the Beograd-Bar Railway Line. Tender for "Supply of Rails, Points and Track Fastenings"; bid deadline Jan. 12. Railway Transport Enterprise, Beograd. Copies of tender documents available from Zeleznicko Transportno Preduzece Beograd, Direkcija za izgradnju pruge Beograd-Bur, Nemanjina St. 6/II, Beograd.

Primary smelting, refining of nonferrous metals

● 33300—INDIA—185 kg. of titanium rods and sheets. Tender No. NK/MP/06(691)/70. Purchase Manager, Hindustan Aeronautics Ltd., Nasik Div., Ozar Township Post, Taluk Niphad (Nasik), Maharashtra, India. Bid deadline Dec. 15.

Rolling, drawing, extruding of nonferrous metals

● 33500—INDIA—Supply of cables for use in diesel locomotives as follows: 1) 1325/.020" 1000 v. spec. 13200 AR2; 2) 650/.020" same; 3) 41/.020" 300 v. spec. 13203 Ra; 4) 26/.010", same. Would prefer to obtain prices F.O.B. Indian Ports if available, if not c.i.f. prices may be submitted. Tender No. 702/Genl/ML. A. B. Banerjee, Deputy Controller of Stores, Diesel Locomotive Works, Varanasi, Uttar Pradesh, New Delhi.

● 33500—THAILAND—Aluminum conductor, bare, 19 strand, 1000 meters; aluminum conductor, polyethylene covered, No. 2 AWG, 7 strand, 300,000 meters; No. 4 AWG, 7 strand, 140,000 meters; No. 336.4 MCM, 19 strand, 100,000 meters. Bid deadline Dec. 11; Tender No. MEA-PSD-215. Purchase and Stores Dept., Metropolitan Electricity Authority, 121 Chakraphet Road, Bangkok 2. Specifications available on loan from Dept. of Commerce, BDC-663, Wash., D.C. 20230 ★(202-967-2181).

● 33500—THAILAND—Supply of 5,000 m. of copper cable, three conductors,

compact sector, 15KV impregnated paper insulated thickness 0.175 inch, metallized paper tape or semiconducting tape strand shield, copper tape phase shield, commercially pure lead sheathed thickness 0.090 inch, extruded heavy duty black neoprene jacket thickness 0.090 inch, for use on 12 kv. 50 cycle grounded neutral system. Tender No. MEA-PSD-216, bid deadline Dec. 24. Contact Purchases & Stores Dept., Metropolitan Electricity Authority, 121 Chakraphet Rd., Bangkok.

Hand tools, general hardware

34230—CYPRUS—Hand, edge tools, except machine tools, hand saws. Quote c.i.f. Cyprus. Direct purchase & agency. "COLTEX" Industrial & Commercial Co. Ltd. (importer, dist., retailer), 171 D Makarios Ave., P.O. Box 558, Limassol. WTD 10/70.

34232—PORTUGAL—Garden hand tools. Direct purchase & agency. OTIL-Organizacao Tecnica de Importacao, Lda. (imp., dist., agent), Praca Mousinho de Albuquerque, 139-2° Oporto. WTD in prep.

34290 — GERMANY — Pin-hook and wedge stakes; guy rope stops for camping tents. IMPORTEX Handelsgesellschaft mbH & Co. KG (importer), 35 Stresemannstrasse, P.O. Box 1469, 28 Bremen 1. WTD 10/70.

34294 — CYPRUS — Builders' hardware. Quote c.i.f. Cyprus. Direct purchase & agency. COLTEX Industrial & Commercial Co. Ltd. (importer, dist., retailer), 171D Makarios Ave., P.O. Box 558, Limassol. WTD 10/70

Plumbing fixtures

● **34300—PAKISTAN**—Sanitary fittings including 570 hand showers with C. P. flexible tube and hook, complete with other fittings; 25 stainless steel kitchen sinks with single and double drainers; 550 stainless steel towel bars with flanged holders. Tender No. S-13/598/69-70/IDA. Procurement will be financed by IDA Credit No. 87-Pak. Purchaser: Director of Supply & Inspection, Government of East Pakistan, 48 Motijheel Commercial Area, Dacca-2. Cable: "SUPPLY" Dacca. Bid deadline Dec. 5. Copies of tender documents available for U.S. $5.25.

Fabricated structural metal goods

34460—PORTUGAL—Prefabricated steel stairs, staircases, fire escapes, railings. Rodrigues Fonseca & Carvalho, Lda. (importer, mfr.), Rua de Serpa Pinto, 269, Oporto. WTD in prep.

34492 — PORTUGAL — Prefabricated, portable metal buildings, parts. Rodrigues Fonseca & Carvalho, Lda. (importer, mfr.), Rua de Serpa Pinto, 269, Oporto. WTD in prep.

Metal stampings

34616—CYPRUS—Pilferproof, other metal commercial closures of aluminum. Quote c.i.f. Cyprus. Direct purchase & agency. Zen Closures (importer, dist., agent), Galileos St., P.O.B. 1088, Limassol. WTD 10/70.

Fabricated metal products

● **34900 — BOLIVIA** — Butterfly valve, 1750 mm nominal diameter, with pipe burst safety device; C.1 Power Services Ltd. Specification R 60029/BPL 101 attached. Equipment for Cahua Hidroelectric Power Project. Tender No. R 60029/BPL 101; bid deadline Dec. 12. Bid made on behalf of Bolivian Power Ltd. C.1 Power Services Ltd., 276 St. James St. W., Montreal 126, Quebec.

34940—NETHERLANDS — Butt welding fittings, ASA B 16.9 (carbon, stainless and alloy steels); threaded and socket weld fittings, ASA B 2.1 and ASA B 16.11 (bronze, carbon, stainless and alloy steels and aluminum); flanges, ASA B 16.5 (carbon, stainless and alloy steels); valves, ASA, all materials. N.V. Technisch Handelsbureau G. de Boer, Attn: K. de Boer (importer, dist.), P.O. Box 56, or Kloveneirsburgwal 103, Amsterdam. WTD 4/70.

34941—CANADA — Automatic regulating, control valves. Thorburn Mill Supply Ltd. (dist.), 173 Oneida Dr., Pointe Claire, Quebec. WTD 10/70.

34942—NETHERLANDS—Metal tubes. Exclusive representations. N.V. Leeuwtechniek (importer, dist.), 25 Rieteweg, P.O. Box 68, Zwolle. WTD 10/70.

34943—CANADA—Metal valves for piping systems and equipment, except plumbing, heating valves; diaphragm valves, pop safety valves, relief valves. Thorburn Mill Supply Ltd. (dist.), 173 Oneida Dr., Pointe Claire, Quebec. WTD 10/70.

Engines, turbines

● **35100—ARGENTINA**—Supply and installation of four 112 MW Francis turbines with vertical shaft; four 112 MW synchronous generators, water cooling system and water draining system for the Futaleufu Hydro Project. Tender No. 89; bid deadline Dec. 21; correspondence preferred in Spanish. Specifications available for U.S. $125 from Agua y Energia Electrica, Corrientes 531, 1er piso, Buenos Aires. Official budget for project $12.5 million.

Farm machinery

35220 — EL SALVADOR — Used farm machinery/implements, principally agricultural tractors of John Deere, Caterpillar, Massey-Ferguson trade marks, or equal, and implements such as plows, harrows, listers, planting/fertilizing machinery. Antonio Compte (importer, dist., retailer), Avenida Morazan No. 118, San Salvador. WTD 8/70.

Construction, mining, materials handling equipment, machinery

● **35300—BURMA**—Bids asked for seven off-highway haulers; two crawler-type power shovels, 2 cu. yd. bucket; four portable rotary air compressors; three wheel-type tractor shovel loaders, 3 cu. yd. buckets; two crawler mounted rock drills, self-propelled; four crawler tractors with angledozers, 250 HP. Bid deadline Dec. 16. Delivery of equipment from January 1971 thru 1973. Chairman, Cement Mills, Rangoon Cement Office, 465/469 Maha Bandocla St., Rangoon. Copy of tender available on short-term loan from the General Industrial Equip. Div., BDC-647, Dept. of Commerce, Washington, D.C. 20230 ★(202-967-5585).

● **35300—TAIWAN**—One traveling level luffing (kangaroo) type, bulk cargo unloading crane for unloading bulk bauxite from bulk cargo carrier up to 30,000 D.W.T., and also for loading and unloading general cargo if required. Tender No. FL2A-4002 (M); bid deadline Dec. 11. Central Trust of China, Purchasing Dept., 49, Wu Chang St., Sec. 1, Taipei. Specifications available on short term loan from General Industrial Equip. Div., BDC-647, Dept. of Commerce, Washington, D.C. 20230 ★ (202-967-5585).

35310—PORTUGAL — Construction machinery, equipment. Direct purchase & agency. OTIL-Organizacao Tecnica de Importacoes, Lda. (importer, dist., agent), Praca Mousinho de Albuquerque, 139-2°, Oporto. WTD in prep.

35340—PORTUGAL — Dumbwaiters. Direct purchase & agency. OTIL-Organizacao Tecnica de Importacoes, Lda. (importer, dist., agent), Praca Mousinho de Albuquerque, 139-2°, Oporto. WTD in prep.

35370—INDIA—Slag transporter comprising specially designed truck chassis for pay loads; equipped with mechanical tilting and hydraulically operated lifting devices. Delivery required within eight months. Specifications, drawings available on loan from Trade Opp. Staff, BDC-541, Rm. 5877, Dept. of Commerce, Washington, D.C. 20230. Mahindra Ugine Steel Co. Ltd., Engineering Dept (mfr.), 14 Altamount Rd., Bombay 26. WTD in prep.

Metalworking machinery

● **35400 — INDIA** — Two 10-ton, single column, crank type notching presses with 200x400 mm. table and 2.5 KW motor-open height 200 mm., frame gap 230 mm. Tender No. S-104/8-177/P-8/2386; bid deadline Dec. 18. Global Procurement, Controller of Stores & Purchase, Bharat Heavy Electricals Ltd., P.O.B.H.E.L., Ranipur, Near Hardwar, Uttar Pradesh. Tender copies may be obtained from the above address for 25 rupees ($3.33) per tender copy.

● **35400—IRAN**—800 right and left widia type cutting tips, 7x14x25; and 600 right and left widia type cutting tips, 10x18x40. Tender No. 1138/49; bid deadline Dec. 23. Purchasing Dept. (Tenders & Contracts Section), Iranian State Railways, Tehran. Copies of tender notice available from Metalworking Equip. Div., BDC-649, Dept. of Commerce, Washington, D.C. 20230 ★ (202-967-5652).

35482 — CYPRUS — Power-driven hand tools, including parts, attachments. Quote c.i.f. Cyprus. Direct purchase & agency. "COLTEX" Industrial & Commercial Co., Ltd. (importer, dist., retailer), 171 D Makarios Ave., P.O. Box 558, Limassol. WTD 10/70.

35484—GERMANY—Automotive maintenance machinery, equipment. Direct purchase & agency. Correspondence requested in German. Franz Boettcher (importer, dist.), 58 Friedrichstrasse, D 7800 Freiburg i.Breisgau. WTD 10/70.

Special industry machinery

● **35500—INDIA**—One molding press to mold insulation on armature coil of traction motors under heat and pressure before placement in armature slots during manufacture of armature. The press should include two independent pressing units, each capable of molding two sets of armature coils. Tender No. C1/NS/-TM/M&P/70/c/779; bid deadline Feb. 9. Controller of Stores, Chittaranjan Locomotive Works, Hindustan Buildings, 4 Chittaranjan Ave., Calcutta. Specifications available on short-term loan from the General Industrial Equip. Div., Dept. of Commerce, BDC-647, Washington, D.C. 20230 ★ (202-967-5585).

35512—CYPRUS—Wine making, filling, capping, labeling machines. Quote c.i.f. Cyprus. Direct purchase & agency. Aristotelis & Zenios (Arizen) Ltd. (importer, dist., mfr.), Galileos St., P.O.B. 65, Limassol. WTD 10/70.

35512—YUGOSLAVIA—Complete plant (line) for production of potato flakes for instant mashed potatoes, capacity 400 kg/h (880 lbs. per hr.). Vocar-Hidroprodukt (importer, dist., mfr.), Trg Djure Salaja 11, Cacak. WTD 8/69.

35595 — ENGLAND — Surgical cotton processing machinery. Specifications available from Trade Opportunities Staff, BDC-541, Rm. 5877, U.S. Dept. of Commerce, Washington, D.C. 20230. Wetco Ltd. (importer), Walmar House, 296 Regent St., London, W.1. WTD in prep.

35595—IRAN—Equipment to set up small plant to manufacture emery abrasive. JAMASKO Co. Mr. A. Sarvi (importer), Ave. Aryamehr, Opposite Sazeman Ab, 2nd Floor, Tehran. WTD in prep.

35595—KOREA—133 new cigarette-making machines. Machinery Sec., Korean Office of Monopoly (mfr.), 10, 2-ka, Namdaemun-ro, Chung-ku, Seoul.

35595—SINGAPORE—Glass bottle making equip. A. J. G. Wilson, gen mgr., Drug Houses of Australia (Asia) Pte. Ltd. (mfr.), P.O. Box 29, Jurong Town, Singapore 22. WTD in prep.

35595—THAILAND—Automatic machinery for manufacturing acoustical board made from bamboo, straw, waste paper or pulp, with capacity of 1000 sq. ft. per 8 hrs. a day. Thai Universal Eng. Co., Ltd. (importer, dist., contractor), 92/18-21 Larn Luang Rd., P.O. Box 1817, Bangkok. WTD in prep.

General industrial machinery

● 35600—INDIA—Supply of 336 tubular heaters. Tender No. S-104/8/206/P-8/E; bid deadline Dec. 25. Controller of Stores & Purchase, Bharat Heavy Electricals Ltd., P.O. Ranipur, Hardwar, U.P. Copy of tender is available on short-term loan from the Metalworking Equip. Div., Dept. of Commerce, BDC-649, Washington, D.C. 20230 ★ (202-967-5652).

● 35600—TURKEY—Deep-well turbine pumps, 605; procurement will comprise unassembled parts to make up pump proper with shants, impellers, bearings, seals for assembly by purchaser. Capacity: 20-80 lt./sec., 60 M. tota head, 2900 rpm—1450 rpm. File No. 70-25T-50; bid deadline Dec. 15. State Hydraulic Works (DSI—Devlet su Isleri Genel Mudurlugu, Makina ve Ikmal Dairesi Baskanligi), Yucetepe Mahallesi, Maltepe, Ankara.

35673—PORTUGAL — Ultrasonic ovens. PRESMALT-Sociedade Portuguesa de Prensagem e Esmaltagem, S.A.R.L. (mfr.), Rua Afonso de Albuquerque, 28-A, Povoa de Santa Iria. WTD in prep.

35690—NEW ZEALAND—Motor vehicle disposal plant to reclaim metal from scrapped vehicles; Estimated volume 25,000 vehicles per yr. G. J. Shearer, Technical Services Mgr. (mfr.), Private Bag, Auckland. WTD in prep.

35690—TURKEY—Steel spraying installation for cleaning surface of hot rolled pipe strips and making them suitable for welding. Profil Boru Sanayi A.S. (mfr.), Gumussuyu Caddesi, Ongan, No. 53/2, Gumussuyu, Taksim, Istanbul. WTD 10/70.

Office, computing machines

35720 — ITALY — Typewriters. Rey di Gavioli Rag. Gastone (importer, agent, exporter), 40 Corso Cavour, I 41100–Modena. WTD 11/70.

35731—ITALY — Electronic computing equipment. Rey di Gavioli Rag. Gastone (importer, agent, exporter), 40 Corso Cavour, I 41100-Modena. WTD 11/70.

35741—ITALY — Calculating, accounting machines. Rey di Gavioli Rag. Gastone (importer, agent, exporter), 40 Corso Cavour, I 41100-Modena. WTD 11/70.

Service industry machinery

35852—PORTUGAL — Room air-conditioners. Direct purchase & agency. OTIL-Organizacao Tecnica de Importacao, Lda. (importer, dist., agent), Praca Mousinho de Albuquerque, 139-2° Oporto. WTD in prep.

35857—NEW ZEALAND—Freezing tunnel to produce individually wrapped, quick frozen strawberries; minimum capacity 1 ton per 24 hrs. International Trade & Finance Co. Ltd., Attn: E. O. Hunter (agricultural college), P.O. Box 311, Christchurch.

35891—PORTUGAL—Commercial cooking, food warming equipment. Direct purchase & agency. OTIL-Organizacao Tecnica de Importacao, Lda. (importer, dist., agent), Praca Mousinho de Albuquerque, 139-2° Oporto. WTD in prep.

35892—PORTUGAL — Water softeners. Direct purchase & agency. OTIL-Organizacao Tecnica de Importacao, Lda. (importer, dist., agent), Praca Mousinho de Albuquerque, 139-2°, Oporto. WTD in prep.

Electric transmission, distribution equipment

● 36100 — INDIA — Supply 57 current transformers, 220 KV and 132 KV; also lightning arresters; voltage transformer; potential divider coupling capacitors. Tender Numbers 43/70, 44/70, 45/70, 46/70; bid deadline Dec. 18. Office of the Superintendent, Technical/Electrical Projects, Rm. 321, Third Fl., Vidyut, Soudha 4, Andhra Pradesh, India. One set of specifications available for reference from the Dept. of Commerce, BDC, Rm. 5886C, Washington, D.C. 20230 (202-967-4188).

Household appliances

36321—SOUTH AFRICA — Combination refrigerator freezers: complete units, 10 cu. ft. and over, for 220 v. 50 cycle, A.C. Electrical & Hardware Distributors (Pty.) Ltd. (importer, dist.), 112 Buitengracht St., P.O. Box 3862, Cape Town, Cape Province. WTD in prep.

36393—PORTUGAL—Food waste disposers. Direct purchase & agency. OTIL-Organizacao Tecnica de Importacao, Lda. (importer, dist., agent), Praca Mousinho de Albuquerque, 139-2° Oporto. WTD in prep.

Electrical wiring equipment

36430—NETHERLANDS—Plugs, receptacles, switches, terminals, all other components for manufacture of electric cable harnesses, mainly for military vehicles. Direct purchase & agency. White Products N.V. Attn: A. G. Nusink, Mgr. (importer, dist., exporter, mfr.), 17 Industrieweg, or P.O. Box 31, Oudenbosch. WTD 10/70.

36443—ISRAEL—Pipe AN 781-4 and 781-1 (180 units each) for use on aircraft engines. Bet-Shemesh Engines Ltd. (importer, mfr.), P.O. Box 88, Bet-Shemesh. Attn: Y. Attali, Import/Export Mgr. WTD 9/70.

Communication equipment

● 36600—NEW ZEALAND — Supply of 176 mobile radiotelephone units for motorcycles. Tender No. MTQ 823/70; bid deadline Dec. 8. Copies of tender announcement and specifications available from Communications-Electronics Div., BDC-643, Room 4209, Dept. of Commerce, Washington, D.C. 20230 ★ (202-967-4823), or from Stores Manager, Ministry of Transport, Private Bag, Wellington.

36623—ISRAEL—Electronic devices for detecting foreign bodies in used bottles, beverage industry. National Council for Research & Devel. Center of Scientific & Technological Information (govt. agency), P.O. Box 20125, Tel Aviv. Attn: Mr. A. Shavit, Head, Div. of Documentation.

36623—PORTUGAL—Door opening and closing devices, radio and photo electric cell operated. Direct purchase & agency. OTIL-Organizacao Tecnica de Importacao, Lda. (importer, dist., agent), Praca Mousinho del Albuquerque, 139-2°, Oporto. WTD in prep.

36626—SOUTH AFRICA—Audio visual educational, training aids. Direct purchase & agency. National Business Institute (Pty.) Ltd. (imp., retailer), Broadway Centre, Foreshore, P.O. Box 4046, Cape Town, Cape Province. WTD 10/70.

Motor vehicles, equipment

37141—GERMANY — Rubber automotive parts, radiator hoses, fan belts, but no tires; rubber replacement parts; small auto accessories. Direct purchase & agency. Rudolf Warme GmbH & Co. (importer, dist., agent), 6272 Niedernhausen/Ts., Idsteiner Str. 7. WTD 11/70.

Ship building, repairing

37313—KOREA—Seaworthy vessel, delivered to port of Pusan or home port, for transporting perishable commodities, mainly fish. Specifications available from Trade Opp. Staff, BDC-541, Rm. 5877, Dept. of Commerce, Washington, D.C. 20230. Deadline Jan. 6. Korea Cold Storage Co., Ltd. (govt. agency), IPO. Box 1694, Seoul.

Engineering, laboratory, scientific, research instruments, equipment

● 38100—TAIWAN—Supply one set of each: electrolytic analyzer; electric muffle furnace; hardness twintester; universal testing machine; metal polishing machine; metallograph microscope; sheet metal testing machine. Tender No. FL2C-4009; bid deadline Dec. 15. ADB loan received toward cost of copper fabrication plant project under which this tender is issued. Invited by the Taiwan Metal Mining Corp., 83 Chung Hwa Rd., Taipei. Terms and specifications available on loan from the Scientific & Business Equip. Div., BDC-653, Dept. of Commerce, Washington, D.C. 20230 ★ (202-967-2939).

Instruments for measuring, controlling, indicating physical characteristics

● 38200—GREECE—Bid deadline for supply of testing instruments, devices and special and general use tools for testing and maintaining of automatic telephone exchanges has been extended to Dec. 8.

(See *Commerce Business Daily*, Oct. 26, p. 18.) Tender No. 6815 is invited by Hellenic Telecommunications Org. S.A., Athens. Terms and conditions in English, and specifications in German available on loan from the Scientific & Business Equip. Div., BDC-653, Dept. of Commerce, Washington, D.C. 20230 ★ (202-967-2939).

Surgical, medical instruments

● **38400—CONGO (K)**—Supply 20 insulated baby incubators, 220V-50 cycles. Tender No. 861/70; bid deadline Dec. 11. Correspondence preferred in French. DCMP, Ministry of Health, P.O. Box 1497, Kinshasa 1. Terms and specifications in French available on loan from Scientific & Business Equip. Div., Dept. of Commerce, BDC-653, Washington, D.C. 20230 ★ (202-967-2939).

38410—GERMANY — Hypodermic syringes, needles for veterinary medicine; surgical, medical instruments for veterinary medicine, stock breeding equipment. Prices requested c.i.f. European ports. H. Hauptner (importer, mfr.), 38-44 Kuller Strasse, 565 Solingen 1. WTD 10/70.

Toys, amusement, sporting goods

39410 — NETHERLANDS — Toys and games, infants' toys, hobby handicrafts, structural and model kits, sets and components. Direct purchase and exclusive representation. Reyne & Zonen (importer, dist.), 63 Noorderhoofdstraat (P.O. Box 7), Krommenie. WTD 10/70.

Novelties, buttons, notions

39640 — GERMANY — Grommets and snap fasteners for camping tents; plastics or metal zippers, slide fasteners for camping tents. IMPORTEX Handelsgesellschaft mbH & Co. KG (importer), 35 Stresemannstrasse, P.O. Box 1469, 28 Bremen 1. WTD 10/70.

Manufacturing industries

● **39900—SINGAPORE**—Supply of automatic water spray fire fighting and alarm installation for protection of transformers, turbo-generators and boiler fuel oil equipment for extensions of Jurong Power Station which will comprise three 120 MW units. Tender No. EE 936.99; bid deadline not announced. Tender documents are available at a deposit of S $1,000 (Singapore $3.03=U.S. $1.00) from the Chief Electrical Engineer, Public Utilities Board, City Hall, Singapore 6. Tender deposit refundable on receipt of a bona fide tender. A copy of tender application should be sent simultaneously to the Board's Consulting Engineers, Merz and McLellan, Amberley, Killingworth, Newcastle-upon-Tyne, NE 12 ORS, England.

39912—CYPRUS—Paint, varnish brushes. Quote c.i.f. Cyprus. Direct purchase & agency. "COLTEX" Industrial & Commercial Co. Ltd. (importer, dist., retailer), 171 D Makarios Ave., P.O. Box 558, Limassol. WTD 10/70.

39999—PORTUGAL — Gifts, novelties. Direct purchase & agency. Alfredo Aires Alves de SA (imp., dist., agent), Rua da Constituicao, 52, Oporto. WTD in prep.

Antique, secondhand stores

59330—GAMBIA—Second-hand clothing. George Banna & Sons, Attn: Ian Edgar (importer), P.O. Box 143, Bathurst. WTD in prep.

Other Foreign Official Tenders

ALGERIA—The Algerian Ministry of Industry and Energy issued tenders for the modernization of four brick and tile factories. These plants are located at Baraki, Boufarik, Meftah, and Hadjout. Each of the tenders is identical and divided into two separate phases: the first calls for a general engineering study of the existing plant to determine necessary measures required to modernize it; the second phase calls for carrying out of the modernization. Bid deadline Jan. 31. Write: Ministere de l'Industrie et de l'Energie, Immeuble "le Colisee," Rue Ahmed El-Bey, Alger, Algerie. A set of specifications in French for each project is available for review in the Dept. of Commerce, BDC, Rm. 5629, Washington, D.C. 20230.

BURMA—The Chief Mechanization Officer, Mechanization Div., Agricultural & Rural Development Corp., 459 Prome Rd., Rangoon issued a tender for the following: 33 items of engine testing, overhauling equip. totaling 221 units; 28 items of electrical system testing, servicing equip. totaling 219 units; 12 items of fuel system testing, repairing equip. totaling 78 units; 13 items of lifting, moving equip. totaling 139 units; 13 items of welding equip., tools totaling 123 units; 12 items of blacksmith equip., tools totaling 68 units; 102 items of general workshop equip., tools totaling 1,420 units; 11 items of lubricating equip. totaling 509 units; four items of cleaning equip. totaling nine units; 11 items of tire servicing, repairing equip. totaling 83 units; 11 items of spray painting equip., tools totaling 47 units; 30 items of carpentry equip., tools totaling 76 units; five items of sheet metal workers' equip., tools totaling six units; seven items of textile refitting equip. totaling seven units; six items of draftsmen's equip. totaling 20 units; eight items of machine tool attachments totaling 196 units. Tender No. 3(T) ARDC/MECH (70-71); bid deadline Jan. 23. Copies of specifications available from ILTO Staff, BDC-541, Dept. of Commerce, Washington, D.C. 20230 ★ (202-967-4674) on a short-term loan.

COLOMBIA—The Empresa De Acueducto Y Alcantarillado De Bogota issued Tender No. 92 for the supply of telemetry equipment. Bid deadline Jan. 15. Bids should offer telemetry and remote control equipment for the Water Supply and Sewer Co. of Bogota. Copies of tender announcement and specifications are available from the Empresa Y Alcantarillado De Bogota, Plan Maestro De Acueducto Carrera 40. No. 22-B-60, Piso 3 Bogota, Colombia, for 1,000 Colombian Pesos (U.S. $1 = 18.86 pesos).

HONDURAS—A tender has been issued for the supply and installation of telephone exchange system and automatic billing equipment. Bid deadline Feb. 10. Turnkey bids required for equipment, materials, accessories, labor, training of personnel, installation and maintenance of the equipment; bids should be for total exchange system. Copies of tender announcement and specifications available from the Ministerio De Comunicaciones Y Obras Publicas, Barrio La Barrio La Bolsa, Comayaguela D.C. Honduras, for U.S. $200 per set.

HONG KONG—The Secretary, Central Tender Board issued Tender No. Pt/46/70/A-10088 for the supply of television receivers and antennae. Bid deadline Dec. 18. Bid should offer 250 TV sets, 625 line system band IV and V; 750 TV sets, 625/405 line dual system; 250 TV antennae, high gain fringe area band IV-V; 750 TV antennae, medium gain normal service band IV-V. Copies of tender announcement and specifications available from the Secretary, Central Tender Board, Colonial Secretariat, Central Government Offices, Lower Albert Rd., Hong Kong, or on short-term loan from the Communications-Electronics Div., BDC-643, Rm. 4209, Dept. of Commerce, Washington, D.C. 20230. ★ (202-967-4823).

INDIA—Superintending Engineer, Technical/Electrical (Project) issued Tender No. T442/Apt 47/70 for the supply of telecommunications equipment. Bid deadline Jan. 18. Bid should offer power line carrier, telemetry, carrier relay, teleprinters, and UHF/microwave equipment. Copies of tender announcement and specifications available from the Superintending Engineer, Technical/Electrical (Projects), Andhra Pradesh State Electricity Board, Vidyut Soudha, Hyderabad 4, India (Specifications-Rs 28) or on short-term loan from the Communications-Electronics Div., BDC-643, Rm. 4209, Dept. of Commerce, Washington, D.C. 20230 ★ 202-967-4823).

INDIA—The Deputy Chief Engineer (C.P.), Posts & Telegraphs Directorate, issued Tender No. 162-20/70 TPL(CP) for the supply of UHF equipment. Bid deadline Feb. 4. Bids should offer UHF terminal equipment, accessories and testing instruments. Copies of tender announcement and specifications available from the India Supply Mission, 2536 Massachusetts Ave. NW., Washington, D.C. 20008. The fee is $2.50; also available on a short-term loan to firms located in the U.S. from the Communications-Electronics Div., BDC-643, Room 4209, Dept. of Commerce, Washington, D.C. 20230 ★(202-967-4823).

KENYA—An IDA loan in various currencies amounting to $6.1 million has been received toward the cost of educational development involving a large volume of school facilities construction. Construction firms not registered with the Kenya Ministry of Works are invited to make a formal application to the Permanent Secretary, Ministry of Works, P.O. Box 30260, Nairobi (marked for the attention of the Chief Quantity Surveyor) before Dec. 31. Prequalified contractors will be invited to bid for each of a series of five packages, such as agriculture institutes, farmers training centers, primary teachers colleges, etc. A list of these projects is available from the Dept. of Commerce, BDC-645, Washington, D.C. 20230 (202-967-5289), and the Commerce Field Office, 11444 Federal Bldg., 450 Golden Gate Ave., San Francisco, Calif. 94102 (415-556-5868).

KOREA—The Korea Cold Storage Co., Ltd., issued a tender for 25 sets closed-type refrigerated show cases; five sets refrigerated storage cabinets; four sets teletypewriters (keyboard page printer type); 79 items laboratory equip. of vari-

ous quantities; 119 items of chemicals for laboratory supply. Tender No. KCSC-ADB-II(2); bid deadline 2 p.m. (Korean time), Jan. 6. Financed by the Asian Development Bank. Sealed bids in five copies to be sent to the Korea Cold Storage Co. Ltd., I.P.O. Box 1694, Seoul. Copies of terms and specifications available on short-term loan from ILTO Staff, BDC-541, Rm. 5877, Dept. of Commerce, Washington, D.C. 20230 ★ (202-967-4674).

PAKISTAN—The Divisional Engineer (Purchase II), T & T Directorate, issued Tender No. 3-2/70-769 for the supply of telephone cables. Bid deadline Jan. 14. Bids should offer telephone junction and local cables, dropwire and cable accessories. Copies of tender announcement and specifications available from the Divisional Engineer (Purchase II), T & T Directorate General, Block No. 12, Room No. 3, Frere Rd., Karachi 1, Pakistan for Rs 100 or on a short-term loan to firms located in the U.S. from Communications-Electronics Div., BDC-643, Room 4209, Dept. of Commerce, Washington, D.C. 20230 ★(202-967-4823).

PAKISTAN—The Dacca Water Supply & Sewerage Authority has made a call for tenders for the preparation of site, furnishing of materials, installation of foundation, and the fabrication, erection, testing and painting of a one million imp. gal. elevated water reservoir. Tender No. DW10-70; bid deadline Jan. 5. IDA financing. Tender documents may be obtained free from the tender issuing authority: Chairman, Dacca Water Supply & Sewerage Authority, Standard Bank Bldg., 156/157 Motijheel Commercial Area, Dacca-2, East Pakistan; cable: "WASADAC", Dacca. Set of documents may be seen in Rm. 5629 of the Dept. of Commerce, BDC, Washington, D.C. 20230.

TANZANIA—Tenders are invited for supply of miscellaneous scientific, teaching and workshop equipment for five new and 24 extensions to secondary schools and three extensions to teachers and technical colleges. Second IDA education project 149-TA. Tender documents issued Dec. 15. Bid deadline not announced. Write: Culham-Hunter, P.O. Box 805, Dar es Salaam, Tanzania. Cable: Quants.

THAILAND — Ministry of Education, Dept. of Vocational Education, Bangkok, issued Tender No. LIVE-18 for various equip. including: undercutter, commutator, lathes and universal types; A.C. motors and controllers; VOM multimeters; portable electric hammer drills; pal service generators; slide regulators; harrow disc hydraulic; coil tester; tools; mower; feed truck, etc. IBRD financed. Bidders may submit bids for any or all items. Bid deadline Jan. 20. Terms, conditions, specifications available on a short-term loan from ILTO Staff, BDC-541, Rm. 5877, Dept. of Commerce, Washington, D.C. 20230 ★ (202-967-4674).

TRINIDAD — The Trinidad & Tobago Electricity Commission has issued Tender Nos. 2096-2107: No. 2096 for polythene insulated aerial pilot cable, seven-pair; No. 2097 for 20,000 galvanized mild steel coach screws; No. 2098 for 2,000 cross arm tension straps; No. 2099 for 200 linemen's safety straps; Nos. 2100 & 2101 for 12,000/240-120V transformers, ten 300 KVA and six 500 KVA; Nos. 2102 & 2103 for 12,000/415 V transformers, ten 300 KVA and six 500 KVA; Nos. 2104 & 2105 for 1,000 2x40 watt and 500 4x40 watt fluorescent street lighting fittings; No. 2106 for 30,000 service connectors and shrouds; No. 2107 for 8,000 stay rods; No. 2108 for 12,000 20 watt fluorescent lamps (tubes); and No. 2109 for 25,000 low tension house service insulators. Bid deadline Dec. 11. Specifications available from the Dept. of Commerce, BDC-651, Room 5886C, Washington, D.C. 20230 ★ (202-967-4188).

New Trade Lists

The Bureau of International Commerce has published the following Trade Lists. Copies may be obtained by firms domiciled in the U.S. from BIC-924, Dept. of Commerce, Washington, D.C. 20230, and from Commerce Field Offices. The price is $1 per list for each country.

State Trading Organizations—Bulgaria, October 1970

The following lists provide complete coverage for Brazil. They may be ordered by the titles given below or by the five digit identification number. All are dated August 1970.

Brazil

No. — *Title*

01000—Farm, forestry, fishery products; mining companies
20000—Food, kindred products; tobacco, tobacco products
22000—Textile industry
23000—Apparel, accessories; miscellaneous fabricated textile products, personal leather products
24000—Lumber, wood products; furniture, fixtures
26000—Pulp, paper, paperboard mill products; converted paper, paperboard products; building paper, boards
28100—Industrial chemicals
28200—Plastics materials, synthetics; plastic products
28300—Drugs; soap, cleaners, toilet goods
28500—Paints, allied products; gum, wood chemicals
28700—Agricultural chemicals; miscellaneous chemical products
29000—Petroleum, petroleum products
30000—Rubber, rubber products; leather, leather products (except footwear, personal leather goods, tires, inner tubes)
32000—Stone, clay, glass products
33000—Primary metals, metal products, ferrous, non-ferrous
34100—Metal cans; cutlery, hand tools, general hardware; heating apparatus (except electric), plumbing fixtures
34400—Fabricated structural metal products; industrial fasteners; metal stampings; miscellaneous fabricated metal products
35100—Engines, turbines
35200—Farm machinery, equipment
35300—Construction, mining, materials handling machinery, equipment
35400—Machine tools; special dies, tools, jigs, fixtures, industrial molds; machine tool accessories; other metalworking machinery
35500—Food products machinery; miscellaneous special industrial machinery, nonelectrical
35520—Textile industry machinery; woodworking, paper, printing industries machinery
35600—General industrial machinery, equipment, nonelectrical
35700—Office, computing, accounting machines; service industry machinery, miscellaneous nonelectrical machinery
36100—Electrical test, distributing equipment; electrical industrial apparatus (includes motors, generators, industrial controls, welding equipment, carbon, graphite products, capacitors, rectifying apparatus, etc.)
36300—Household appliances; electronic equipment for home entertainment; phonograph records, tapes
36400—Electric lighting, wiring equipment; miscellaneous electrical equipment, supplies
36600—Commercial, industrial, military communication equipment
36700—Electronic components, accessories
37000—Transportation equipment, parts, accessories (includes auto repair shops)
38100—Professional, scientific instruments, controlling devices
38600—Photographic equipment, supplies; watches, clocks; jewelry, silverware, plated ware
39000—Musical instruments; toys, amusements, sporting, athletic goods; office, artists' materials; costume jewelry; novelties, notions; miscellaneous manufactured products

The following lists provide coverage for Guatemala and may be ordered by title or five digit identification number. All are dated August 1970.

Guatemala

No. — *Title*

01000—Farm, forestry, fishery products; mining companies
20000—Food, kindred products; tobacco, tobacco products
22000—Textile industry
23000—Apparel, accessories; miscellaneous fabricated textile products; personal leather products
24000—Lumber, wood products; furniture, fixtures
26000—Pulp, paper, paperboard mill products; converted paper, paperboard products; building paper, boards
28000—Chemicals, plastics, related products
29000—Petroleum, petroleum products
30000—Rubber, rubber products; leather, leather products
32000—Stone, clay, glass products
33000—Primary metals, metal products, ferrous, nonferrous
34000—Fabricated metal products
35000—Machinery, nonelectrical
36000—Electrical machinery, equipment, supplies
37000—Transportation equipment, parts, accessories
38000—Professional, scientific instruments, controlling devices; photographic equipment, supplies; watches, clocks; jewelry, silverware, plated ware
39000—Musical instruments; toys, amusements, sporting, athletic goods; office, artists' materials; costume jewelry; novelties, notions; miscellaneous manufactured products

Future Construction Abroad

ARGENTINA — Information indicates that Fabricaciones Militares plans to reject bids it received to **construct and install a fine-gage rolling mill** at its steel mill Altos Hornos de Zapla. A new international call for tenders for this mill will be issued.

ARGENTINA—CHACOFI S.A. has received the contract for construction of the portion of the Zarate-Brazo Largo project covering **work on National Route 12,** from Route 9 to the end of a viaduct on the left bank of the Parana Guazu River. Work consists of grading, margin development, finishing and paving, totaling $6,946,000. Road will be 33,754 meters long, of which 26,239 meters will be graded, and 7,515 meters will consist of viaducts and bridges. U.S. earth moving, grading and construction equipment firms may contact CHACOFI S.A., Viamonte 773, Piso 3°, Buenos Aires.

AUSTRALIA—Cessna Aircraft Co. is conducting feasibility studies on setting up an **aircraft assembly plant.** With over 50% of the local market, Cessna will most likely be assembling in Australia prior to the end of 1971 in conjunction with Rex Aviation of Sydney.

BOTSWANA—Botswana has applied for a $2.3 million World Bank loan for the **Gaborone-Lobatse Water Supply Project.** The loan will be used to construct a pipeline from Gaborone Dam to Naune (Dam) treatment works in Lobatse.

CANADA—The Greater Vancouver Rapid Transit Study Committee Report indicates a need for a **rapid transit system in Vancouver.** Over a 20-year period, costs are estimated at $300 million and would include four rapid transit lines. The report recommends spending $12 million between 1971 and 1974. The next phase would start in 1975 with an annual outlay of $16.5 million. Copies of the report available for $5.25 from the Greater Vancouver Regional District, 2294 W. 10th Ave., Vancouver 9, British Columbia.

DOMINICAN REPUBLIC—Early December construction of a $RD2.5 million modern **medical center** in Santo Domingo has been announced. The center will consist of four inter-connected six-floor buildings. The Secretary of Public Works will be in charge of engineering. Equipment requirements are: first building—sound equipment, tape recorders, closed television circuits; second building—oxygen, central suction equipment, X-ray equipment; third building—four elevators, central telephone exchange, intercommunication equipment; fourth building—100 beds (later 180), operating equipment, sterilization equipment, maternity ward equipment, central air-conditioning system, background musical equipment. Write: Clinica Santo Domingo, C. POR A. Provisional address: Dr. Milton B. Bello, Pres., Condominio Santurce, Avenida Independencia No. 109, Santo Domingo, Dominican Republic.

FRANCE—The Port of Le Havre Authority announced **port modernization and expansion plans** requiring expenditures of over 1 billion francs. The plan will make Le Havre into a modern port with an associated deep water industrial zone capable of handling ships considerably larger than those now docking at Antwerp and Rotterdam. The projects will create a deep water industrial zone, the adaptation of the port to new transportation techniques such as containerization, barge carrying and roll-on/roll-off methods, the modernization of existing installations, creation of a major ship repairing center, and the building of an artificial island to receive the future generations of super tankers and related land facilities.

FRANCE—A 300 hectare area of land has been purchased for **motel and recreational development** in the Lodeve region of the Herault Department (34) of Southern France, which is northwest of Montpellier. The project will focus on the communities of Octon, Lavalette, Saint Martin and Combes. Construction will probably include 1,500 detached houses, plus hotels, motels, commercial premises and swimming pools. The project will be undertaken by Voltaire, Mairesse & CIE, 285 Ave. Fenelon in Paturages, Brussels. French agents are at 11, Bd. Pasteur, 34 Lodeve, and 45 Ave. Saint-Saens, 34–Beziers.

FRANCE—The Holiday Inn organization of Memphis plans to develop a 300 room **motel** in the (Part Dieu) redevelopment area of Lyon and a 300 room **motel** in the Rungis area of Paris. The latter project envisions ultimate expansion to 900 rooms including restaurant and recreational facilities.

GERMANY—The Frankfurt City Council has initiated a survey on the number and categories of **hotels** which should be established in that area. The Council considers it necessary to increase Frankfurt's hotel capacity within a short time and is willing to offer city-owned sites located between the city's center and the airport to encourage construction. However, proposals should be submitted as soon as possible.

ITALY—As part of the economic development program for underdeveloped areas of Italy, the Interministerial Committee for Economic Development has announced a project for **establishing a fifth metallurgical center in Italy,** probably located in the province of Calabria. The project would involve an integrated cycle steel center set up to produce a wide range of steel products. Annual capacity would be around 10 million metric tons. In the first stage of operations, processing, maintenance, transportation and other services, about 10,000 workers will be employed.

VENEZUELA—Venezuela will seek offers for the construction of **five toll roads.** A company interested in constructing any or all highways would have to build, finance, maintain and administer the highways and be reimbursed through tolls. The highways are: Petare (Caracas)—Guarenas, approx. 20 km., estimated cost Bs 350 million; La Penita—El Tazon de Yare, about 15 km., estimated cost Bs 34,800,000; feeder El Tazon de Yare, 15 km., Bs 40.6 million; Marin—Encrucijada de Chicacoa, 80 km., Bs 242 million; and Barquisimeta—Puente Torres, 70 km., Bs 247 million. All highways carry dense traffic at present and are to be converted into toll roads. Especially the Petare-Guarenas route which leads into an industrial area and is the only route leading from Caracas to the eastern part of the country. The Ministry is willing to study any serious proposals. Write: Ministerio de Obras Publicas, Direccion de Vialidad, Torre Sur, Centro Simon Bolivar, Caracas.

VENEZUELA—A **telecommunications link** between the Avila Mountain in Caracas and the Montana Negra in Curacao will probably be established. Plans for the system include the installation of a 72-channel microwave connection to handle radio, telegraph and telephone communications. U.S. manufacturers of microwave long-distance telecommunications equipment should contact: C. A. Nacional Telefonos de Venezuela, (CANTV), Centro Nacional de Telecommunicacion, Avenida Libertador, Caracas.

Visiting Buyers And Officials

CHILE—Fernando Casabellas Gebauer, Cenet (Electronic & Telecommunications National Center), Avenida Tupper 2007, Casilla 5157 Fond 89175 Santiago, **interested in contacting the manufacturers of microcircuits, research centers and manufacturers of machinery for the same.** Nov. 9 for 60 days. c/o Chilean Development Center, 80 Pine, New York, N.Y. 10005. Itinerary: New York, Philadelphia, Boston and Dallas.

FINLAND—Jussi Nahkuri, Oy Wald. Tefke Ab, Ruoholahdenkatu 22, Helsinki 18., **interested in foodstuffs for catering trade, non-food products for institutional customers—import agencies.** Nov. 29 for two weeks via New York. c/o Finnfoods, Inc., P.O. Box 231, Oradell, N.J. 07649. Itinerary: New York, Chicago, Los Angeles WTD 6/70.

INDIA—Ravikant N. Ruia, Dir., Essar Construction & Carriers Ltd., 306 Thambu Chetty St., Madras 1, **interested in purchase of two self propelled hopper barges or two dumb hopper barges** with two seagoing tugs of approx. capacity 500 tons each to carry rocks weighing from 10-1000 kg. End Nov. or early Dec. via New York for 10 or more days. c/o Dept. of Commerce New York Field Office. Itinerary: confirmed on arrival. WTD in prep.

PAKISTAN—Ahmed Ali Ansari, AJAZ Agencies, 29 Magh Bazar Rd., P.O. Box 739, Dacca-2, **interested in agency franchise with U.S. machinery manufacturers to sell their products in East Pakistan (finished hardwares).** Nov. 1 for 3 months. c/o IBH International, 100 Sargent Dr., New Haven, Conn. 06509. Itinerary: New York, New Haven, Washington, Cleveland, Milwaukee, Philadelphia, Detroit and San Francisco. WTD 5/70.

SOUTH AFRICA—D. Tugendhaft, Remarque Wear (Pty) Ltd., 39 Sivewright Ave., Doornfontein, JHB, **interested in importing job lot cloth for children's wear manufacture and in meeting jobbers or mills having close outs of job lots.** Nov. 14 via New York for 3 weeks. Itinerary: New York; San Francisco, c/o Dept. of Commerce Field Office; Los Angeles, c/o Dept. of Commerce Field Office. WTD 5/65 under revision.

International Business Reports

Forms of Wage and Salary Payment for High Productivity. Organization for Economic Cooperation and Development 1970. 165 pp. $3.

An OECD sponsored seminar in 1967 reviews present forms of wage and salary payment and management's experience with and evaluation of them. Explored are the effects of the different forms of productivity in different environments and job settings, the administrative problems in modern industrial relations and their effects on general and specific wage movements within the local, occupational, industrial and national labor markets.

Write: OECD Publications Center, 1750 Pennsylvania Ave., NW., Washington, D.C. 20006.

World Bank Atlas. Published by the International Bank for Reconstruction and Development. Washington, D.C. 1970. 16 pp. Free.

The fifth edition of this publication offers figures on population (mid-1968), GNP per capita (1968) and average annual population and GNP growth rates (1961-68) for 191 countries and territories. Maps are included for each area of the world covered.

The tables provide statistical evidence of considerable economic expansion in most developing countries, but they also show that much of the advance is being absorbed by high rates of population growth.

Write: Publications Division, World Bank, 1818 H. St. NW., Washington, D.C. 20433.

Ukers' International Tea and Coffee Buyers' Guide, 1969-70. (24th ed.) Published by the Tea and Coffee Trade Journal, New York. 464 pp. $5.

This reference and index to sources of supply for buyers in the tea, coffee, spice and allied trades presents worldwide information. Data provided include the leading tea and coffee exporting countries, the principal consuming countries, production and consumption statistics, leading trade associations, a glossary of tea and coffee terms, coffee packers and wholesalers, chain stores, importers, brokers and agents.

Write: Tea and Coffee Trade Journal Co., 79 Wall St., New York, N.Y. 10005.

This is the German Market. Published by the Axel Springer Publishing Group, Central Advertising Marketing, Berlin, Hamburg, and Ahrensburg, 1970. 146 pages.

This publication provides in one volume comprehensive information concerning the structure of the German market. Compiled primarily as an aid to market research consultants, merchandisers, advertising agents, and others interested in a detailed account of the German market and its consumers, the handbook covers such subjects as population data, labor force and incomes, German industries and crafts, domestic and foreign trade, traffic and tourism, money and credit, and German advertising practices.

Each chapter includes a brief introduction contributed, in most instances, by a staff member of a well-known German newspaper and accompanied by statistical tables. The publication concludes with a forecast concerning the growth of the population and the development of the German economy, as well as a list of useful addresses for those wishing to establish contacts in such fields as government, industry and trade, the press, advertising, and trade promotion.

Write: Axel Springer & Sohn, 6, Kaiser-Wilhelmstrasse, 2000 Hamburg 36, Germany.

Calendar For World Traders

Dec. 3-4 — Ann Arbor, Mich.— Seminar on International Marketing Through Agents and Distributors, U. of Michigan Graduate School of Business Admin.

Dec. 8—Chicago—In-office meeting for exporters, Commerce Field Office.

Dec. 8—St. Joseph, Mo.—Export Development Seminar (9:30 a.m.) and Export Documentation Seminar (2 p.m.), Chamber of Commerce headquarters.

Dec. 8—St. Louis—'Show-You' Export Workshop on Documentation, Commerce Field Office, 2 p.m. Sponsor: World Trade Club.

Dec. 9—Memphis—Mid-South Exporters' Roundtable, Sheraton Motor Inn. Subject: Traveling on Business and Pleasure.

Dec. 9—Parkersburg, W. Va.—Export seminar sponsored by Commerce's Charleston Field Office.

Dec. 9—Wallingford, Conn.—Combination Export Managers of Conn. luncheon. Yankee Silversmith Inn, 11:15 a.m.

Dec. 10 — Chicago — International Trade Club luncheon.

Dec. 10—New York—Overseas Automotive Club, luncheon followed by meeting, Summit Hotel, noon.

Dec. 15 — New York — Luncheon meeting of the FCIB Hardware, Automotive and Allied Trades Group, Advertising Club, 12:30.

Dec. 16—Chicago—Mid-West Credit Management Assn., Bismarck Hotel.

Dec. 16 — Wheaton, Ill. — Export Seminar. Sponsors: Illinois Dept. of Development, Wheaton Chamber of Commerce, Chicago Field Office.

Dec. 16—New York—Dinner meeting of FCIB Publishers Export Credit Group, Advertising Club, 4 p.m.

New Publications

When ordering any publication, indicate title and series designation, if indicated, and make checks or money orders payable to the Superintendent of Documents. Orders should be sent to the U.S. Department of Commerce, Washington, D.C. 20230, or to any of its field offices.

OFFICE OF THE SECRETARY

Office of Minority Business Enterprise

OMBE outlook. October. Monthly publication providing information on activities designed to further business opportunities for members of minority groups. Free.

United States Department of Commerce Publications, 1969 supplement. A catalog and index. 64pp. 35¢.

Office of Telecommunications

Ionospheric predictions for February 1971. Issued November 1970. Number 95. Annual subscription $4 ($1 additional for foreign mailing). Single copy 35¢.

DOMESTIC AND INTERNATIONAL BUSINESS

BUREAU OF DOMESTIC COMMERCE

Shipments of selected electronic components for calendar years 1960-69. October. 34pp. 25¢.

Construction Review. September. Monthly industry report. Annual subscription $6.50 ($1.75 more for foreign mailing). Single copy 55¢.

Pulp, Paper, and Board. Quarterly industry report. October. Annual subscription $1 (25¢ more for foreign mailing). Single copy 25¢.

Marketing Information Guide. A monthly annotated bibliography. November. Annual subscription $4.50 ($1.25 more for foreign mailing). Single copy 40¢.

BUREAU OF INTERNATIONAL COMMERCE

Export Control Bulletin—Supplement to export control regulations. No. 31. Oct. 22. 25¢.

Foreign Economic Trends

Annual subscription $15 ($6 more for foreign mailing). Single copy 10¢.

Pakistan (ET 70-103). Sept. 23. 18pp.

Colombia (ET 70-107). Sept. 30. 8pp

Thailand (ET 70-104). Sept. 23. 12 pp.

Dahomey (ET 70-110). Oct. 5. 8pp.

Yugoslavia (ET 70-111). Oct. 5. 8pp.

International Marketing Information Service

Exhibitor's Export Market Guide

U.S. shipbuilding and Marine exhibition aims at huge Japanese market (IMIS 70-49). October. 4pp. 10¢.

Italian demands for advanced medical equipment can spur U.S. sales (IMIS 70-53). October. 4pp. 10¢.

French market for reprographic systems offers sales promise to U.S. (IMIS 70-54). October. 4pp. 10¢

Big German market seen for electronics production equipment (IMIS 70-55). October. 8pp. 10¢.

Overseas Business Reports

Annual subscription $16 ($5 additional for foreign mailing). Single copy, 15¢.

Market profiles for Africa (OBR 70-45). September. Supersedes OBR 69-34. 48pp.

Foreign trade regulations of Portugal (OBR 70-54). September. Supersedes OBR 66-61. 12pp.

Basic data on the economy of Afghanistan (OBR 70-56). October. Supersedes OBR 66-34. 10pp.

ECONOMIC AFFAIRS

OFFICE OF BUSINESS ECONOMICS

Survey of Current Business. October. Annual subscription $9 ($3.75 more for foreign mailing). Single copy $1.

BUREAU OF THE CENSUS

Defense Indicators. October. Series ES4, No. 70-10. Annual subscription $4.50 ($1.25 more for foreign mailing). Single copy 45¢.

Business Conditions Digest. October. Data through September. Series ES1, No. 70-10. Annual subscription, including supplements $16 ($4 more for foreign mailing). Single copy $1.50.

Metropolitan Area Statistics (a reprint from Statistical Abstract of the United States 1970). 66pp. 35¢.

Agriculture

Report on cotton ginnings prior to November 1 for the crop of 1970, by states (A10: 70-7). Nov. 9. 1p. 10¢.

Construction and Housing

Housing authorized by building permits and public contracts: 1969 (C40-69-13). October. 384pp. $2.75. Annual subscription $11 ($2.75 more for foreign mailing).

Housing completions: June 1970 (C22-70-6). October. Annual subscription $1. Single copy 10¢.

Housing starts: September 1970 (C20-70-9). November. Annual subscription $1.50. Single copy 15¢.

Housing vacancies: annual statistics 1969. (Series H-111, No. 59, Part 11). October. Annual subscription (series H-111 and H-121, combined), $1.50 (50¢ more for foreign mailing). Single copy 20¢.

1970 Census of Housing

General Housing Characteristics — Advance Report:

Idaho (HC(V1)-14). October. 12pp. 30¢.

Housing Unit Counts for States—Preliminary Report:

Pennsylvania (HC(P1)-40). October. 2pp. 10¢.

1967 Census of Construction Industries

Area Statistics—Final Reports. Each of the following reports is dated October, contains 27 pages, and is priced at 35¢:

Alaska (CC67-A-3)
Arizona (CC67-A-4)
Connecticut (CC67-A-8)
Dist. of Columbia (CC67-A-10)
Hawaii (CC67-A-13)
Iowa (CC67-A-17)
Kansas (CC67-A-18)
Maine (CC67-A-21)
Massachusetts (CC67-A-23)
Michigan (CC67-A-24)
Minnesota (CC67-A-25)
Nebraska (CC67-A-29)
New Hampshire (CC67-A-31)
North Dakota (CC67-A-36)
Ohio (CC67-A-37)
Oregon (CC67-A-39)
Rhode Island (CC67-A-41)
South Dakota (CC67-A-43)
Vermont (CC67-A-47)
Wyoming (CC67-A-52).

Distribution and Services

Weekly retail sales. Estimated sales of retail stores in the United States for the week ending Oct. 31 (CB 70-370). Nov. 5. 2pp. 10¢.

Weekly retail sales. Estimated sales of retail stores in the United States for the week ending Nov. 7 (CB 70-373). Nov. 12. 2pp. 10¢.

1967 Census of Business

Merchandise Line Sales—Retail Trade:

Missouri (BC67-MLS-27(Rev.). October. 94pp. $1.

United States (BC67-MLS-1). October. 70pp. 60¢.

Foreign Trade

U.S. General Imports of Cotton Manufactures, by Country and Geneva Agreement Category: Sept. 1970 (FT 130). November. Annual subscription $1. Single issue 10¢.

Highlights of U.S. Export and Import Trade: September 1970 (FT 990). October. Annual subscription $5 ($1.25 more for foreign mailing). Single copy 45¢.

U.S. Imports—schedule A commodity and country: August 1970 (FT 135). October. Annual subscription $21 ($5.25 more for foreign mailing). Single issue $1.75.

U.S. Exports—schedule B commodity and country: August 1970 (FT 410). October. Annual subscription $33 ($8.25 more for foreign mailing). Single copy $2.75.

Governments

Construction expenditure of state and local governments: July-Sept. 1970 (GC70, No. 3). November. 4 pp. 10¢.

Industry

1967 Census of Manufactures

Each report provides information for a group of related industries.

Weaving mills (MC67(2)-22A). October. 44pp. 50¢.

Rubber and miscellaneous plastics products (MC67(2)-30A). October. 46 pp. 50¢.

Household appliances (MC67(2)-36B). October. 46pp. 55¢.

Surgical, dental, and ophthalmic equipment and supplies (MC67(2)-38A). October. 48pp. 55¢.

Photographic equipment, clocks, watches and watchcases (MC67(2)-38B). October. 26pp. 40¢.

Miscellaneous manufactures (MC67(2)-39D). October. 36pp. 50¢.

Current Industrial Reports

Consumption of selected fibers on the woolen and worsted systems, seasonal adjustment supplement: 1954 to 1969 (Series: M22D Supplement). $2 per year (incl. MA-22E and MA-22M), single copy 15¢.

Spun yarn for sale, seasonal adjustment supplement 1960 to 1969 (Series: M22F Supplement). $1.50 per year, single copy 15¢.

Inorganic fertilizer materials and related acids: summary for 1969 (preliminary) (Series: M28B(69)-13). $1.50 per year, single copy 15¢.

Asphalt and tar roofing and siding products: summary for 1969 (Series: M29A (69)-13). $1.50 per year, single copy 15¢.

Flat glass: summary for 1969 (Series: MQ-32A(69-5). $1 per year, single copy 25¢.

Communication equipment: 1969 (Series: BDSAF-363B(69)-1). 2pp. 25¢.

Converted flexible packaging products: summary for 1969 (Series: M26F(69)-13). 8pp. $1.50 per year, single copy 15¢.

1967 Census of Manufactures

Industry Series. Final figures for a group of related industries on quantity and value of products shipped and material consumed, cost of fuels and electric energy, capital expenditures, inventories, employment and payroll.

Knitting mills (MC67(2)-22B). October. 46pp. 50¢.

Men's and boys' apparel (MC67(2)-23A). October. 66pp. 65¢.

Women's and children's underwear, headwear, children's outerwear (MC67(2)-23C). October. 58pp. 60¢.

Miscellaneous fabricated textile products (MC67(2)-23E). October. 42pp. 50¢.

Commercial printing and manifold business forms (MC67(2)-27B). October. 42 pp. 50¢.

Metal cans, cutlery, handtools, and general hardware (MC67(2)-34A). October. 44pp. 45¢.

Screw machine products, fasteners and washers; metal stampings; and metal services (MC67(2)-34D). October. 38pp. 50¢.

Construction, mining, and materials handling machinery and equipment (MC67 (2)-35B). October. 58pp. 55¢.

General industrial machinery and equipment (MC67(2)-35E). November. 54pp. 55¢.

Miscellaneous electrical equipment (MC67 (2)-36E). October. 38pp. 45¢.

Aircraft and parts (MC67(2)-37B). October. 34pp. 45¢.

Area series. A separate report for each State and the District of Columbia presents data for industries and industry groups on value of shipments, value added by manufacturing, employment, payrolls, man-hours, new capital expenditures, etc.

Arizona (MC67(3)-3). October. 22pp. 35¢

Colorado (MC67(3)-6). October. 26pp. 40¢.

Hawaii (MC67(3)-12). October. 20pp. 30¢.

Idaho (MC67(3)-13). October. 22pp. 35¢.

Iowa (MC67(3)-16). October. 36pp. 40¢.

Maine (MC67(3)-20). October. 26 pp. 35¢.

Montana (MC67(3)-27). October. 22pp. 35¢.

Nebraska (MC67(3)-28). October. 30pp. 40¢.

Nevada (MC67(3)-29). October. 22pp. 30¢.

New Hampshire (MC67(3)-30). October. 26pp. 35¢.

New Mexico (MC67(3)-32). October. 22 pp. 35¢.

Oregon (MC67(3)-38). October. 30 pp. 40¢.

Rhode Island (MC67(3)-40). October. 30 pp. 35¢.

South Dakota (MC67(3)-42). October. 22 pp. 35¢.

Utah (MC67(3)-45). October. 22pp. 35¢.

Vermont (MC67(3)-46). October. 22pp. 35¢.

Wisconsin (MC67(3)-50). October. 42pp. 40¢.

Population

1970 Census of Population

Population Counts for Standard Metropolitan Statistical Areas—Preliminary Reports. Each of the following reports is dated October, contains two pages, and is priced at 10¢.

Allentown-Bethlehem-Easton, Pa. (PC (P2)-6;

Albany-Schenectady-Troy, N.Y. (PC(P2)--4);

Atlantic City, N.J. (PC(P2)-14);

Buffalo (PC(P2)-32);

Davenport-Rock Island-Moline, Iowa-Ill. (PC(P2)-49);

Jersey City (PC(P2)-91);

Newark (PC(P2)-140);

Paterson-Clifton-Passaic, N.J. (PC(P2)-150);

Philadelphia (PC(P2)-153;

St. Louis (PC(P2)-174);

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Annual Mean Income, Lifetime Income, and Educational Attainment of Men in the United States, for selected years, 1956-68 (Series P-60, No. 74). 88pp. 65¢.

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Bathymetry and magnetics of a region (POL-421-3) 29° to 35°N, 155° to 165°W (ESSA TR ERL 146-POL4). December 1969. 28pp. and separate bathymetric and magnetic anomaly maps. $1.

Key to Meteorological records documentation no. 5.321. Catalog of meteorological satellite data-ESSA 7 television cloud photography. Jan. 1 thru Mar. 31, 1969. November. 202pp. $2.

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Bibliographies on fabric flammability—Part 2. Testing and test methods (Tech. Note 498-2). September. 39pp. 45¢.

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